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Title Page

Draft Report (Volume 2 of 2)

ORAL PRENATAL AND POSTNATAL
DEVELOPMENT STUDY OF
WR238605 SUCCINATE IN RATS

Sponsor: U.S. Army Medical Materiel
Development Activity

Test Article: WR238605 Succinate

Contract No.: DAMD17-92-C-2001

Study Director

Debra L. Kirchner, Ph.D., D.A.B.T.

In-Life Phase Completed On

September 18, 1996

Performing Laboratory

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The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department or Army position, policy, or decision, unless so designated by other documentation.

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<p>This study evaluated the toxic potential of WR238605 Succinate on the pregnant/lactating female CD[®] rat (F₀ generation) and the survival and development of their offspring (F₁ generation) consequent to exposure from implantation through weaning. Doses were 2, 6, and 18 mg base/kg/day based on a developmental toxicity study in female CD[®] rats (UIC/TRL Study No. 154) in which decreased body weight gains and food consumption occurred throughout the study at 30 mg base/kg/day while marginal reductions in body weight and food consumption were noted during the dosing period at 10 mg base/kg/day. In the present study, doses of 2, 6, and 18 mg base/kg/day were administered by daily gavage to female CD[®] rats (the F₀ generation) for at least 36 days: from gestation day (GD) 0 through postnatal day (PND) 20. The results are summarized in Table 1. There were no mortalities or treatment-related clinical signs or necropsy observations noted in the F₀ generation maternal animals at any dose level. At 18 mg base/kg/day, maternal toxicity was observed as significantly reduced body weights, noted essentially throughout the dosing period (i.e., GD9 - PND21), and significantly reduced food consumption, noted over the gestation period (i.e., GD6 - 20). Significantly reduced food consumption occurred at 6 mg base/kg/day following the initiation of dosing over GD6 - 9; however, body weights were unaffected. Administration of WR238605 Succinate did not affect food consumption or body weights at the low dose. Gestation duration, parturition, and litter size were unaffected by treatment at any dose level. Thus, administration of WR238605 Succinate did not adversely affect the dams' ability to deliver and rear her offspring. Offspring at 18 mg base/kg/day had evidence of growth retardation and slight developmental and functional delays. Adverse findings included significantly reduced body weights in both sexes throughout the pre- and postweaning periods; slight, significantly delayed attainment of eye opening in both sexes; and slight, but significantly decreased rearing activity in females. All other developmental parameters and neuromotor assessments, survival, and attainment of sexual maturity were unaffected at the high dose. No treatment-related effects occurred in any parameter in the F₁ generation at 2 or 6 mg base/kg/day. In conclusion, the no-observable-effect level (NOEL) of WR238605 Succinate on pregnancy, parturition, and lactation in the F₀ generation dams was 18 mg base/kg/day in spite of toxicity observed at this dose level. Based on alterations in body weights, and slight developmental and functional delays at the high dose, the NOEL for the development of the F₁ generation was 6 mg base/kg/day.</p>					
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APPENDIX I
INDIVIDUAL F₁ GENERATION PREWEANING SURVIVAL DATA

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP
TEST: VIABLE PUPS

STUDY ID: 200P
STUDY NO: 200P
ABBR: VIABLE

SEX: MALE

UNITS: pups

Animal ID	DAY 0	DAY 4	DAY 7	DAY 14	DAY 21
GROUP: 1-M:0 mg base/kg/day					
101M	4.0	4.0	3.0	3.0	3.0
102M	5.0	5.0	4.0	4.0	4.0
103M	6.0	6.0	4.0	4.0	4.0
104M	7.0	7.0	4.0	4.0	4.0
105M	7.0	7.0	4.0	4.0	4.0
106M	6.0	6.0	4.0	4.0	4.0
107M	3.0	3.0	3.0	3.0	3.0
108M	4.0	4.0	4.0	4.0	4.0
109M	7.0	7.0	4.0	4.0	4.0
110M	6.0	6.0	4.0	4.0	4.0
111M	3.0	3.0	3.0	3.0	3.0
112M	9.0	9.0	4.0	4.0	4.0
113M	7.0	7.0	4.0	4.0	4.0
114M	9.0	9.0	4.0	4.0	4.0
115M	4.0	4.0	4.0	4.0	4.0
116M	5.0	5.0	4.0	4.0	4.0
117M	10.0	10.0	4.0	4.0	4.0
118M	9.0	9.0	4.0	4.0	4.0
119M	5.0	5.0	4.0	4.0	4.0
120M	5.0	5.0	4.0	4.0	4.0
121M	6.0	5.0	4.0	4.0	4.0
122M	8.0	7.0	4.0	4.0	4.0
123M	9.0	9.0	4.0	4.0	4.0
124M	11.0	11.0	4.0	4.0	4.0
125M	2.0	2.0	2.0	2.0	2.0
MEAN	6.3	6.2	3.8	3.8	3.8
SD	2.35	2.35	0.50	0.50	0.50
N	25	25	25	25	25

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP
TEST: VIABLE PUPS

STUDY ID: 200P
STUDY NO: 200P
ABBR: VIABLE

SEX: MALE

UNITS: pups

Animal ID	DAY 0	DAY 4	DAY 7	DAY 14	DAY 21
GROUP: 2-M:2 mg base/kg/day					
126M	8.0	8.0	4.0	4.0	4.0
127M	9.0	9.0	4.0	4.0	4.0
128M	6.0	6.0	4.0	4.0	4.0
129M	8.0	8.0	4.0	4.0	4.0
130M	9.0	9.0	4.0	4.0	4.0
131M	3.0	3.0	3.0	3.0	3.0
132M	7.0	7.0	4.0	4.0	4.0
133M	3.0	3.0	3.0	3.0	3.0
134M	3.0	3.0	3.0	3.0	3.0
135M	4.0	4.0	4.0	4.0	4.0
136M	5.0	5.0	4.0	4.0	4.0
137M	11.0	11.0	4.0	4.0	4.0
138M	8.0	8.0	4.0	4.0	4.0
139M	6.0	6.0	4.0	4.0	4.0
140M	6.0	6.0	4.0	4.0	4.0
141M	10.0	10.0	4.0	4.0	4.0
142M	11.0	11.0	4.0	4.0	4.0
143M	5.0	5.0	4.0	4.0	4.0
144M	5.0	5.0	4.0	4.0	4.0
145M	4.0	4.0	4.0	4.0	4.0
146M	6.0	6.0	4.0	4.0	4.0
147M	7.0	7.0	4.0	4.0	4.0
148M	5.0	5.0	4.0	4.0	4.0
149M	3.0	3.0	3.0	3.0	3.0
150M	6.0	6.0	5.0	5.0	5.0
MEAN	6.3	6.3	3.9	3.9	3.9
SD	2.44	2.44	0.44	0.44	0.44
N	25	25	25	25	25

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP
TEST: VIABLE PUPS

STUDY ID: 200P
STUDY NO: 200P
ABBR: VIABLE

SEX: MALE

UNITS: pups

Animal ID	DAY 0	DAY 4	DAY 7	DAY 14	DAY 21
GROUP: 3-M:6 mg base/kg/day					
151M	6.0	6.0	4.0	4.0	4.0
152M	8.0	8.0	4.0	4.0	4.0
153M	5.0	5.0	4.0	4.0	4.0
154M	7.0	7.0	4.0	4.0	4.0
155M	6.0	6.0	4.0	4.0	4.0
156M	8.0	8.0	4.0	4.0	4.0
157M	6.0	6.0	4.0	4.0	4.0
158M	7.0	6.0	4.0	4.0	4.0
160M	7.0	7.0	4.0	4.0	4.0
161M	7.0	7.0	4.0	4.0	4.0
162M	4.0	4.0	4.0	4.0	4.0
163M	6.0	6.0	4.0	4.0	4.0
164M	7.0	6.0	4.0	4.0	4.0
165M	8.0	7.0	4.0	4.0	4.0
166M	5.0	5.0	4.0	4.0	4.0
167M	6.0	6.0	4.0	4.0	4.0
168M	9.0	9.0	4.0	4.0	4.0
169M	5.0	5.0	4.0	4.0	4.0
170M	7.0	7.0	4.0	4.0	4.0
171M	6.0	6.0	4.0	4.0	4.0
172M	9.0	9.0	4.0	4.0	4.0
173M	8.0	7.0	4.0	4.0	4.0
174M	6.0	6.0	4.0	4.0	4.0
175M	5.0	5.0	4.0	4.0	4.0
MEAN	6.6	6.4	4.0	4.0	4.0
SD	1.32	1.25	0.00	0.00	0.00
N	24	24	24	24	24

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP
TEST: VIABLE PUPS

STUDY ID: 200P
STUDY NO: 200P
ABBR: VIABLE

SEX: MALE

UNITS: pups

Animal ID	DAY 0	DAY 4	DAY 7	DAY 14	DAY 21
GROUP: 4-M:18 mg base/kg/day					
176M	6.0	6.0	4.0	4.0	4.0
177M	4.0	4.0	4.0	4.0	4.0
178M	3.0	3.0	3.0	3.0	3.0
179M	8.0	8.0	4.0	4.0	4.0
180M	7.0	7.0	4.0	4.0	4.0
181M	4.0	4.0	4.0	4.0	4.0
182M	4.0	4.0	4.0	4.0	4.0
183M	6.0	6.0	4.0	4.0	4.0
184M	7.0	7.0	4.0	4.0	4.0
185M	5.0	5.0	4.0	4.0	4.0
186M	5.0	5.0	4.0	4.0	4.0
187M	6.0	6.0	4.0	4.0	4.0
188M	8.0	8.0	4.0	4.0	4.0
189M	9.0	9.0	4.0	4.0	4.0
190M	4.0	3.0	3.0	3.0	3.0
191M	7.0	7.0	4.0	4.0	4.0
192M	8.0	7.0	4.0	4.0	4.0
193M	6.0	5.0	4.0	4.0	4.0
194M	5.0	4.0	4.0	4.0	4.0
195M	7.0	7.0	4.0	4.0	4.0
196M	6.0	6.0	4.0	4.0	4.0
197M	5.0	5.0	4.0	4.0	4.0
198M	8.0	8.0	4.0	4.0	4.0
199M	6.0	6.0	4.0	4.0	4.0
200M	8.0	8.0	4.0	4.0	4.0
MEAN	6.1	5.9	3.9	3.9	3.9
SD	1.61	1.68	0.28	0.28	0.28
N	25	25	25	25	25

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP
TEST: VIABLE PUPS

STUDY ID: 200P
STUDY NO: 200P
ABBR: VIABLE

SEX: FEMALE

UNITS: pups

Animal ID	DAY 0	DAY 4	DAY 7	DAY 14	DAY 21
GROUP: 2-F:2 mg base/kg/day					
126F	2.0	2.0	2.0	2.0	2.0
127F	6.0	6.0	4.0	4.0	4.0
128F	5.0	5.0	4.0	4.0	4.0
129F	3.0	3.0	3.0	3.0	3.0
130F	4.0	4.0	4.0	4.0	4.0
131F	9.0	9.0	4.0	4.0	4.0
132F	3.0	3.0	3.0	3.0	3.0
133F	8.0	8.0	4.0	4.0	4.0
134F	8.0	8.0	4.0	4.0	4.0
135F	5.0	5.0	4.0	4.0	4.0
136F	6.0	6.0	4.0	4.0	4.0
137F	2.0	2.0	2.0	2.0	2.0
138F	5.0	5.0	4.0	4.0	4.0
139F	6.0	6.0	4.0	4.0	4.0
140F	5.0	5.0	4.0	4.0	4.0
141F	2.0	2.0	2.0	2.0	2.0
142F	3.0	3.0	3.0	3.0	3.0
143F	6.0	6.0	4.0	4.0	4.0
144F	9.0	8.0	4.0	4.0	4.0
145F	7.0	7.0	4.0	4.0	4.0
146F	6.0	6.0	4.0	4.0	4.0
147F	7.0	7.0	4.0	4.0	4.0
148F	6.0	6.0	4.0	4.0	4.0
149F	7.0	6.0	4.0	4.0	4.0
150F	4.0	3.0	3.0	3.0	3.0
MEAN	5.4	5.2	3.6	3.6	3.6
SD	2.10	2.05	0.71	0.71	0.71
N	25	25	25	25	25

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP
TEST: VIABLE PUPS

STUDY 10: 200P
STUDY NO: 200P
ABBR: VIABLE

SEX: FEMALE
UNITS: pups

Animal ID	DAY 0	DAY 4	DAY 7	DAY 14	DAY 21
GROUP: 3-F:6 mg base/kg/day					
151F	5.0	5.0	4.0	4.0	4.0
152F	5.0	5.0	4.0	4.0	4.0
153F	5.0	5.0	4.0	4.0	4.0
154F	7.0	7.0	4.0	4.0	4.0
155F	8.0	8.0	4.0	4.0	4.0
156F	7.0	7.0	4.0	4.0	4.0
157F	7.0	7.0	4.0	4.0	4.0
158F	6.0	6.0	4.0	4.0	4.0
160F	5.0	5.0	4.0	4.0	4.0
161F	6.0	6.0	4.0	4.0	4.0
162F	7.0	7.0	4.0	4.0	4.0
163F	8.0	8.0	4.0	4.0	4.0
164F	3.0	2.0	2.0	2.0	2.0
165F	4.0	4.0	4.0	4.0	4.0
166F	7.0	7.0	4.0	4.0	4.0
167F	4.0	4.0	4.0	4.0	4.0
168F	4.0	4.0	4.0	4.0	4.0
169F	4.0	4.0	4.0	4.0	4.0
170F	8.0	7.0	4.0	4.0	4.0
171F	5.0	5.0	4.0	4.0	4.0
172F	6.0	6.0	4.0	4.0	4.0
173F	2.0	2.0	2.0	2.0	2.0
174F	6.0	6.0	4.0	4.0	4.0
175F	8.0	8.0	4.0	4.0	4.0
MEAN	5.7	5.6	3.8	3.8	3.8
SD	1.68	1.71	0.56	0.56	0.56
N	24	24	24	24	24

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

D D A T T

INDIVIDUAL ANIMAL REPORT BY GROUP
TEST: VIABLE PUPS

STUDY ID: 200P
STUDY NO: 200P
ABBR: VIABLE

SEX: FEMALE

UNITS: pups

Animal ID	DAY 0	DAY 4	DAY 7	DAY 14	DAY 21
GROUP: 4-F:18 mg base/kg/day					
176F	5.0	4.0	4.0	4.0	4.0
177F	9.0	9.0	4.0	4.0	4.0
178F	8.0	8.0	4.0	4.0	4.0
179F	3.0	3.0	3.0	3.0	3.0
180F	6.0	6.0	4.0	4.0	4.0
181F	7.0	7.0	4.0	4.0	4.0
182F	9.0	9.0	4.0	4.0	4.0
183F	9.0	9.0	4.0	4.0	4.0
184F	6.0	6.0	4.0	4.0	4.0
185F	6.0	6.0	4.0	4.0	4.0
186F	6.0	6.0	4.0	4.0	4.0
187F	5.0	5.0	4.0	4.0	4.0
188F	5.0	5.0	4.0	4.0	4.0
189F	2.0	2.0	2.0	2.0	2.0
190F	10.0	9.0	4.0	4.0	4.0
191F	4.0	4.0	4.0	4.0	4.0
192F	5.0	5.0	4.0	4.0	4.0
193F	11.0	11.0	4.0	4.0	4.0
194F	9.0	9.0	4.0	4.0	4.0
195F	5.0	5.0	4.0	4.0	4.0
196F	7.0	7.0	4.0	4.0	4.0
197F	7.0	7.0	4.0	4.0	4.0
198F	4.0	4.0	4.0	4.0	4.0
199F	5.0	5.0	4.0	4.0	4.0
200F	3.0	3.0	3.0	3.0	3.0
MEAN	6.2	6.2	3.8	3.8	3.8
SD	2.33	2.30	0.47	0.47	0.47
N	25	25	25	25	25

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APPENDIX J

INDIVIDUAL F₁ GENERATION DEVELOPMENTAL PARAMETERS

- Prewaning Period
- Postweaning Period

DATA

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Litter Means for Day of Attainment of Developmental Parameters
0 mg base/kg/day
Males

Dam #	Surface Righting	Incisor Appearance	Eye Opening	Cliff Avoidance
101	2.0	10.0	14.0	15.0
102	2.0	9.5	14.0	15.0
103	2.0	10.8	13.8	15.0
104	2.0	10.5	13.8	15.0
105	2.0	10.8	14.0	15.3
106	2.0	11.3	13.3	15.0
107	2.0	11.0	14.0	15.0
108	1.0	10.0	13.8	15.0
109	2.0	10.0	14.0	15.0
110	2.0	10.3	14.0	15.0
111	1.0	9.3	14.0	15.0
112	2.0	11.3	14.0	15.0
113	2.0	10.0	14.5	15.0
114	2.0	11.5	14.3	15.0
115	1.0	12.0	15.0	15.0
116	1.0	10.0	14.5	15.0
117	1.0	10.3	14.0	15.0
118	1.0	10.3	14.0	15.0
119	1.0	10.3	14.0	15.0
120	1.0	12.0	14.8	15.0
121	1.0	9.5	14.3	15.0
122	1.0	12.0	14.3	15.0
123	1.0	11.8	14.5	15.0
124	1.0	12.3	15.3	15.3
125	2.0	10.5	13.5	15.0
Mean	1.5	10.69	14.15	15.02
S.D.	0.5	0.87	0.44	0.08

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATSPrewaning Period: Litter Means for Day of Attainment of Developmental Parameters
2 mg base/kg/day
Males

Dam #	Surface Righting	Incisor Appearance	Eye Opening	Cliff Avoidance
126	2.0	10.5	14.0	15.0
127	3.0	9.0	14.3	15.0
128	2.0	10.5	14.3	15.0
129	2.0	10.3	13.3	15.0
130	2.0	10.0	14.0	15.3
131	2.0	11.0	13.7	15.3
132	2.0	10.3	14.0	15.0
133	2.0	10.3	14.0	15.0
134	2.0	10.3	14.3	15.0
135	2.0	10.3	14.0	15.0
136	2.0	10.0	14.5	15.3
137	2.0	10.0	14.0	15.0
138	2.0	10.3	14.0	15.3
139	1.0	11.0	14.3	15.0
140	2.0	11.0	14.8	15.0
141	1.0	10.3	13.8	15.0
142	1.0	11.8	15.0	15.0
143	1.0	10.5	14.8	15.3
144	1.0	9.3	14.0	15.0
145	2.0	11.5	14.5	15.0
146	1.0	10.8	14.5	15.0
147	1.0	12.0	15.0	15.0
148	1.0	9.8	14.8	15.0
149	1.0	10.3	15.0	15.0
150	1.0	10.0	14.3	15.0
Mean	1.6	10.44	14.29	15.06
S.D.	0.6	0.68	0.44	0.12

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Litter Means for Day of Attainment of Developmental Parameters
6 mg base/kg/day
Males

Dam#	Surface Righting	Incisor Appearance	Eye Opening	Cliff Avoidance
151	2.0	10.3	14.0	15.3
152	2.0	10.5	14.0	15.0
153	2.0	9.5	14.0	15.0
154	3.0	10.5	13.8	15.0
155	2.0	9.5	14.0	15.0
156	2.0	10.5	14.3	15.0
157	2.0	10.0	14.3	15.0
158	2.0	11.3	14.8	15.3
159	a	a	a	a
160	2.0	10.8	14.3	15.3
161	2.0	10.8	14.0	15.0
162	1.0	10.8	13.8	15.0
163	2.0	9.8	14.0	15.0
164	1.0	11.5	15.0	15.3
165	1.0	11.0	15.0	15.0
166	1.0	11.0	15.3	15.3
167	1.0	10.5	15.0	15.0
168	1.0	11.3	14.5	15.0
169	1.0	11.5	15.0	15.0
170	1.0	10.8	14.8	15.0
171	1.0	11.0	14.5	15.0
172	1.0	12.0	14.8	15.0
173	1.0	10.0	14.3	15.0
174	1.0	10.8	14.0	15.0
175	2.0	9.5	13.8	15.0
Mean	1.5	10.63	14.39	15.06
S.D.	0.6	0.67	0.47	0.12

^aThere was no F₁ litter since F₀ dam No. 159 was not pregnant.

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Litter Means for Day of Attainment of Developmental Parameters
18 mg base/kg/day
Males

Dam #	Surface Righting	Incisor Appearance	Eye Opening	Cliff Avoidance
176	3.0	11.8	14.0	15.0
177	3.0	10.8	13.8	15.0
178	2.0	10.3	14.3	15.3
179	2.0	9.5	14.5	15.3
180	2.0	11.0	14.8	15.0
181	2.0	9.5	13.8	15.0
182	1.0	10.8	14.8	15.0
183	1.0	10.0	14.0	15.0
184	1.0	10.0	14.8	15.0
185	1.0	10.5	14.5	15.0
186	2.0	11.0	14.8	15.0
187	2.0	10.3	14.0	15.0
188	1.0	10.5	14.5	15.0
189	2.0	11.8	15.0	15.0
190	1.0	11.7	15.0	15.0
191	1.0	10.0	14.5	15.0
192	1.0	12.3	15.3	15.3
193	1.0	12.0	15.0	15.0
194	1.0	9.8	14.5	15.0
195	1.0	10.8	15.5	15.5
196	1.0	10.5	15.3	15.3
197	1.0	11.0	15.0	15.0
198	1.0	10.3	14.0	15.0
199	1.0	12.5	15.5	15.5
200	1.0	9.8	14.0	15.0
Mean	1.4	10.74	14.61	15.09
S.D.	0.7	0.86	0.53	0.17

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Litter Means for Day of Attainment of Developmental Parameters

0 mg base/kg/day

Females

Dam #	Surface Righting	Incisor Appearance	Eye Opening	Cliff Avoidance
101	2.0	10.0	13.8	15.0
102	3.0	9.3	14.0	15.0
103	2.0	10.5	14.3	15.0
104	2.0	10.3	13.8	15.0
105	2.0	10.3	14.7	15.0
106	2.0	10.8	13.3	15.0
107	2.0	10.8	14.0	15.0
108	2.0	9.8	13.5	15.0
109	2.0	10.0	14.0	15.0
110	3.0	9.8	14.0	15.0
111	2.0	10.3	14.5	15.0
112	2.0	10.3	14.0	15.0
113	2.0	10.3	14.3	15.0
114	2.0	11.5	13.8	15.0
115	2.0	11.5	14.8	15.0
116	2.0	10.5	14.3	15.0
117	1.0	10.5	14.0	15.0
118	1.0	9.3	14.0	15.0
119	1.0	11.0	14.3	15.0
120	1.0	11.8	14.3	15.0
121	1.0	10.0	14.0	15.0
122	1.0	11.0	14.7	15.0
123	1.0	11.3	14.3	15.0
124	2.0	12.0	15.0	15.0
125	1.0	10.5	13.8	15.0
Mean	1.8	10.54	14.14	15.00
S.D.	0.6	0.71	0.40	0.00

D D A T

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Litter Means for Day of Attainment of Developmental Parameters
2 mg base/kg/day
Females

Dam #	Surface Righting	Incisor Appearance	Eye Opening	Cliff Avoidance
126	3.0	11.0	14.0	15.0
127	3.0	9.3	14.3	15.0
128	3.0	10.0	13.8	15.0
129	2.0	10.0	13.0	15.0
130	3.0	10.3	13.5	15.3
131	2.0	10.3	14.0	15.0
132	2.0	10.7	14.0	15.0
133	2.0	10.5	13.8	15.0
134	2.0	9.0	13.8	15.0
135	2.0	10.3	14.0	15.0
136	2.0	10.0	14.0	15.0
137	2.0	9.0	14.0	15.0
138	2.0	10.0	13.5	15.0
139	1.0	10.3	14.0	15.0
140	2.0	10.8	14.3	15.0
141	1.0	10.0	13.0	15.0
142	1.0	11.7	15.0	15.0
143	1.0	10.8	15.0	15.0
144	1.0	9.5	14.0	15.0
145	1.0	11.3	14.5	15.0
146	1.0	11.0	14.8	15.0
147	2.0	11.8	15.0	15.0
148	1.0	10.0	14.0	15.0
149	1.0	9.8	14.5	15.0
150	1.0	10.0	14.8	15.0
Mean	1.8	10.30	14.10	15.01
S.D.	0.7	0.73	0.55	0.06

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATSPrewaning Period: Litter Means for Day of Attainment of Developmental Parameters
6 mg base/kg/day
Females

Dam#	Surface Righting	Incisor Appearance	Eye Opening	Cliff Avoidance
151	1.0	10.3	14.0	15.0
152	2.0	9.3	14.3	15.5
153	2.0	10.0	14.0	15.0
154	2.0	10.8	13.8	15.0
155	2.0	9.3	14.0	15.0
156	3.0	10.0	13.8	15.0
157	2.0	10.5	14.0	15.0
158	2.0	11.0	14.5	15.0
159	a	a	a	a
160	2.0	11.0	14.5	15.0
161	2.0	10.8	13.8	15.0
162	1.0	11.0	13.5	15.0
163	2.0	9.5	14.0	15.0
164	1.0	11.0	15.0	15.0
165	1.0	10.5	15.0	15.0
166	1.0	10.3	15.0	15.0
167	2.0	10.5	15.0	15.0
168	1.0	11.3	14.0	15.0
169	1.0	11.3	14.8	15.0
170	2.0	10.8	14.3	15.0
171	2.0	11.0	14.0	15.0
172	1.0	11.3	14.5	15.0
173	2.0	10.5	14.0	15.0
174	1.0	10.5	13.5	15.0
175	2.0	10.5	14.0	15.0
Mean	1.7	10.54	14.22	15.02
S.D.	0.6	0.58	0.47	0.10

^aThere was no F₁ litter since F₀ dam No. 159 was not pregnant.

00-1-77

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Litter Means for Day of Attainment of Developmental Parameters
18 mg base/kg/day
Females

Dam #	Surface Righting	Incisor Appearance	Eye Opening	Cliff Avoidance
176	2.0	11.8	14.0	15.0
177	2.0	9.8	13.5	15.0
178	2.0	10.3	14.0	15.0
179	2.0	10.0	14.7	15.0
180	2.0	10.8	14.5	15.0
181	2.0	10.3	13.8	15.0
182	1.0	11.8	14.8	15.0
183	1.0	11.0	14.3	15.0
184	2.0	10.0	14.8	15.0
185	1.0	10.5	14.0	15.0
186	2.0	11.0	14.5	15.0
187	3.0	10.3	14.0	15.0
188	2.0	11.0	14.3	15.0
189	2.0	12.5	15.0	15.0
190	1.0	11.5	15.0	15.0
191	1.0	10.8	14.0	15.0
192	2.0	12.5	15.3	15.3
193	1.0	11.3	14.5	15.0
194	1.0	9.8	14.3	15.0
195	1.0	10.8	15.8	15.8
196	2.0	10.5	15.3	15.3
197	2.0	11.5	15.0	15.0
198	1.0	9.8	14.3	15.0
199	1.0	11.5	15.0	15.0
200	1.0	9.7	14.0	15.0
Mean	1.6	10.83	14.51	15.06
S.D.	0.6	0.82	0.55	0.18

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PREWEANING PERIOD: INDIVIDUAL PUP DATA FOR
MEAN DAY OF ATTAINMENT OF DEVELOPMENTAL PARAMETERS
(Surface Righting Reflex, Incisor Appearance, Eyes Open, Cliff Avoidance)

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
0 mg base/kg/day

Male Pup #	Day	FemalePup#	Day
10101	3	10111	3
10102	2	10112	2
10103	1	10113	2
10104	2	10114	1
		10115	1
		10116	2
		10117	1
Mean	2	Mean	2
S.D.	0.8	S.D.	0.8
10201	3	10214	4
10202	1	10215	3
10203	2	10216	1
10204	2	10217	4
10205	4	10218	2
		10219	2
Mean	2	Mean	3
S.D.	1.1	S.D.	1.2
10301	2	10311	2
10302	2	10312	1
10303	2	10313	1
10304	1	10314	3
10305	1	10315	1
10306	2	10316	3
		10317	2
		10318	2
Mean	2	Mean	2
S.D.	0.5	S.D.	0.8
10401	3	10411	1
10402	1	10412	1
10403	3	10413	1
10404	2	10414	3
10405	1	10415	3
10406	4		
10407	1		
Mean	2	Mean	2
S.D.	1.2	S.D.	1.1

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

D D A T T

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
0 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
10501	2	10511	1
10502	2	10512	3
10503	3	10513	3
10504	3		
10505	1		
10506	3		
10507	1		
Mean	2	Mean	2
S.D.	0.9	S.D.	1.2
10601	2	10611	2
10602	2	10612	2
10603	2	10613	2
10604	1	10614	1
10605	2	10615	3
10606	3	10616	2
Mean	2	Mean	2
S.D.	0.6	S.D.	0.6
10701	2	10711	1
10702	1	10712	3
10703	2	10713	1
		10714	2
Mean	2	Mean	2
S.D.	0.6	S.D.	1.0
10801	1	10811	2
10802	1	10812	2
10803	1	10813	1
10804	1	10814	1
		10815	2
		10816	3
Mean	1	Mean	2
S.D.	0.0	S.D.	0.8

D D A T

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Mean Day of Attainment of Surface Righting Reflex
0 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
10901	2	10911	2
10902	1		
10903	2		
10904	1		
10905	1		
10906	1		
10907	3		
Mean	2	Mean	2
S.D.	0.8		
11001	1	11011	4
11002	3	11012	2
11003	1	11013	1
11004	1	11014	2
11005	4	11015	3
11006	3	11016	3
Mean	2	Mean	3
S.D.	1.3	S.D.	1.0
11101	2	11111	2
11102	1	11112	2
11103	1	11113	3
		11114	1
		11115	3
		11116	2
		11117	2
Mean	1	Mean	2
S.D.	0.6	S.D.	0.7
11201	1	11211	2
11202	3	11212	2
11203	2	11213	1
11204	1		
11205	2		
11206	2		
11207	3		
11208	1		
11209	2		
Mean	2	Mean	2
S.D.	0.8	S.D.	0.6

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

D D A T

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
0 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
11301	3	11311	2
11302	2	11312	3
11303	1	11314	1
11304	3	11315	2
11305	2	11316	2
11306	2		
11313	3		
Mean	2	Mean	2
S.D.	0.8	S.D.	0.7
11401	1	11411	1
11402	1	11412	2
11403	3	11413	2
11404	1	11414	1
11405	1		
11406	3		
11407	2		
11408	1		
11409	1		
Mean	2	Mean	2
S.D.	0.9	S.D.	0.6
11501	1	11511	1
11502	2	11512	3
11503	1	11513	1
11505	1	11514	1
		11515	3
		11516	2
		11517	1
		11518	2
		11519	2
		11504	1
Mean	1	Mean	2
S.D.	0.5	S.D.	0.8
11601	1	11611	2
11602	1	11612	2
11603	1	11613	1
11604	1	11614	1
11617	1	11615	1
		11616	2
Mean	1	Mean	2
S.D.	0.0	S.D.	0.5

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Mean Day of Attainment of Surface Righting Reflex
0 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
11701	1	11711	1
11702	1	11712	1
11703	1		
11704	1		
11705	1		
11706	1		
11707	1		
11708	1		
11713	1		
11714	1		
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
11801	1	11811	1
11802	1	11812	1
11803	1	11813	1
11804	1	11814	1
11805	1		
11806	1		
11807	1		
11808	1		
11809	1		
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
11901	1	11911	1
11902	1	11912	1
11903	1	11913	1
11904	1	11914	1
11905	1	11915	2
		11916	2
		11917	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.5
12001	1	12011	1
12002	2	12012	1
12003	1	12013	1
12004	1	12014	1
12005	1	12015	1
		12016	1
		12017	1
Mean	1	Mean	1
S.D.	0.4	S.D.	0.0

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
0 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
12101	1	12111	1
12102	1	12112	1
12103	2	12113	1
12104	1	12114	1
12105	1	12115	1
12106	1	12116	1
		12117	1
Mean	1	Mean	1
S.D.	0.4	S.D.	0.0
12201	1	12211	2
12202	1	12212	1
12203	1	12213	1
12204	1		
12205	1		
12206	1		
12207	1		
12208	1		
Mean	1	Mean	1
S.D.	0.0	S.D.	0.6
12301	1	12311	1
12302	1	12312	1
12303	1	12313	1
12304	2	12314	1
12305	1		
12306	1		
12307	1		
12308	2		
12309	1		
Mean	1	Mean	1
S.D.	0.4	S.D.	0.0

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

D D A T

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
0 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
12401	1	12411	3
12402	3	12412	1
12403	1	12413	2
12404	1	12415	1
12405	2	12416	1
12406	1		
12407	1		
12408	1		
12409	1		
12410	3		
12414	1		
Mean	1	Mean	2
S.D.	0.8	S.D.	0.9
12501	2	12511	2
12515	1	12512	1
		12513	2
		12514	2
		12516	1
		12517	1
		12518	1
		12519	1
		12520	2
		12521	1
Mean	2	Mean	1
S.D.	0.7	S.D.	0.5

ORAL PRENATAL AND POSNATAL DEVELOPMENT STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
2 mg base/kg/day

Male Pup#	Day	Female Pup#	Day
12601	2	12611	2
12602	2	12612	3
12603	1		
12604	2		
12605	2		
12606	2		
12607	2		
12613	2		
Mean	2	Mean	3
S.D.	0.4	S.D.	0.7
12701	1	12711	3
12702	3	12712	3
12703	4	12713	1
12704	4	12714	1
12705	3	12715	3
12706	3	12716	4
12707	3		
12708	1		
12709	1		
Mean	3	Mean	3
S.D.	1.2	S.D.	1.2
12801	1	12811	4
12802	3	12812	3
12803	3	12813	3
12804	2	12814	1
12805	1	12815	2
12806	3		
Mean	2	Mean	3
S.D.	1.0	S.D.	1.1
12901	2	12911	3
12902	2	12912	3
12903	2	12913	1
12904	3		
12905	3		
12906	1		
12907	1		
12914	3		
Mean	2	Mean	2
S.D.	0.8	S.D.	1.2

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ORAL PRENATAL AND POSNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
2 mg base/kg/day

Male Pup	Day	Female	Day
13001	4	11	4
13002	2	12	3
13003	2	13	2
13004	2	14	1
13005	3		
13006	2		
13007	1		
13008	1		
13009	1		
Mean	2	Mean	3
S.D.	1.0	S.D.	1.3
13101	1	13111	4
13102	2	13112	3
13103	3	13113	3
		13114	2
		13115	2
		13116	2
		13117	2
		13118	1
		13119	3
Mean	2	Mean	2
S.D.	1.0	S.D.	0.9
13201	1	13211	3
13202	2	13212	1
13203	3	13213	3
13204	2		
13205	3		
13206	1		
13207	1		
Mean	2	Mean	2
S.D.	0.9	S.D.	1.2
13301	3	13311	1
13302	2	13312	3
13303	2	13313	1
		13314	1
		13315	4
		13316	3
		13317	1
		13318	3
Mean	2	Mean	2
S.D.	0.6	S.D.	1.2

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ORAL PRENATAL AND POSNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
2 mg base/kg/day

Male Pup	Day	Female	Day
13401	1	13411	1
13402	2	13412	3
13403	3	13413	2
		13414	2
		13415	2
		13416	1
		13417	1
		13418	3
Mean	2	Mean	2
S.D.	1.0	S.D.	0.8
13501	2	13511	1
13502	2	13512	3
13503	2	13513	2
13504	2	13514	3
		13515	2
Mean	2	Mean	2
S.D.	0.0	S.D.	0.8
13601	3	13611	2
13602	2	13612	2
13603	3	13613	3
13604	2	13614	1
13605	2	13615	3
		13616	3
Mean	2	Mean	2
S.D.	0.5	S.D.	0.8
13701	1	13711	3
13702	3	13713	2
13703	2		
13704	2		
13705	2		
13706	2		
13707	3		
13708	2		
13709	2		
13710	2		
13712	2		
Mean	2	Mean	3
S.D.	0.5	S.D.	0.7

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ORAL PRENATAL AND POSNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Mean Day of Attainment of Surface Righting Reflex
2 mg base/kg/day

Male Pup	Day	Female	Day
13801	3	13811	3
13802	1	13812	2
13803	1	13813	2
13804	1	13814	2
13805	1	13815	2
13806	3		
13807	1		
13808	2		
Mean	2	Mean	2
S.D.	0.9	S.D.	0.4
13901	1	13911	1
13902	1	13912	1
13903	1	13913	1
13904	1	13914	1
13905	1	13915	1
13906	1	13916	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
14001	2	14011	2
14002	2	14012	3
14003	4	14013	2
14004	2	14014	1
14005	2	14015	2
14006	2		
Mean	2	Mean	2
S.D.	0.8	S.D.	0.7
14101	1	14111	1
14102	1	14112	1
14103	2		
14104	1		
14105	1		
14106	2		
14107	1		
14108	1		
14109	1		
14110	1		
Mean	1	Mean	1
S.D.	0.4	S.D.	0.0

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UIC/TRL Study No. 200

ORAL PRENATAL AND POSNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
2 mg base/kg/day

Male Pup	Day	Female	Day
14200	1	14211	1
14201	1	14212	2
14202	1	14213	1
14203	2		
14204	1		
14205	1		
14206	1		
14207	1		
14208	1		
14209	1		
14210	1		
Mean	1	Mean	1
S.D.	0.3	S.D.	0.6
14301	1	14311	1
14302	1	14312	1
14303	1	14314	1
14304	1	14315	2
14313	1	14316	2
		14317	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.5
14401	1	14411	1
14402	1	14412	1
14403	1	14413	1
14404	1	14414	1
14405	1	14415	1
		14416	1
		14417	1
		14419	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
14501	1	14511	1
14502	2	14512	1
14503	1	14513	1
14504	2	14514	1
		14515	1
		14516	1
		14517	1
Mean	2	Mean	1
S.D.	0.6	S.D.	0.0

ORAL PRENATAL AND POSNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
2 mg base/kg/day

Male Pup	Day	Female	Day
14601	1	14602	1
14602	1	14612	1
14603	1	14613	1
14604	1	14614	1
14605	1	14615	1
14611	1		
14616	1		
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
14701	1	14711	1
14702	1	14712	1
14703	1	14713	2
14704	2	14714	1
14705	1	14715	2
14706	1	14716	3
14707	1	14717	1
Mean	1	Mean	2
S.D.	0.4	S.D.	0.8
14801	1	14811	1
14802	1	14812	1
14803	1	14813	1
14804	1	14814	1
14805	1	14815	1
		14816	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
14901	1	14911	1
14902	1	14912	1
14903	1	14913	1
		14914	1
		14915	2
		14916	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.4
15001	1	15011	2
15002	1	15012	1
15003	1	15013	1
15004	1	15014	1
15005	2		
15015	1		
Mean	1	Mean	1
S.D.	0.4	S.D.	0.5

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Mean Day of Attainment of Surface Righting Reflex
6 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
15101	2	15111	1
15102	1	15112	2
15103	1	15113	2
15104	2	15114	1
15105	2	15115	1
15106	3		
Mean	2	Mean	1
S.D.	0.8	S.D.	0.5
15201	2	15211	2
15202	1	15212	2
15203	1	15213	3
15204	3	15214	3
15205	3	15215	1
15206	2		
15207	1		
15208	3		
Mean	2	Mean	2
S.D.	0.9	S.D.	0.8
15301	2	15311	1
15302	2	15312	3
15303	2	15313	1
15304	2	15314	2
15305	2	15315	2
Mean	2	Mean	2
S.D.	0.0	S.D.	0.8
15401	2	15411	2
15402	2	15412	2
15403	3	15413	2
15404	3	15414	2
15405	3	15415	3
15406	2	15416	3
15407	3	15417	2
	3		2
	0.5		0.5

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
6 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
15501	2	15511	2
15502	2	15512	2
15503	2	15513	2
15504	2	15514	2
15505	2	15515	1
15506	1	15516	2
		15517	4
		15518	3
Mean	2	Mean	2
S.D.	0.4	S.D.	0.9
15601	2	15611	2
15602	2	15612	3
15603	2	15613	2
15604	2	15614	2
15605	1	15615	2
15606	2	15616	3
15607	2	15617	4
15608	1		
Mean	2	Mean	3
S.D.	0.5	S.D.	0.8
15701	1	15711	2
15702	3	15712	3
15703	1	15713	2
15704	1	15714	1
15705	2	15715	1
15706	1	15716	1
		15717	2
Mean	2	Mean	2
S.D.	0.9	S.D.	0.8
15801	1	15812	2
15802	1	15813	1
15803	2	15814	2
15804	3	15815	2
15805	1	15816	1
15811	1	15817	2
Mean	2	Mean	2
S.D.	0.8	S.D.	0.5

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Mean Day of Attainment of Surface Righting Reflex
6 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
16001	2	16011	1
16002	1	16012	2
16003	1	16013	1
16004	3	16014	2
16005	3	16015	3
16006	2		
16007	2		
Mean	2	Mean	2
S.D.	0.8	S.D.	0.8
16101	1	16111	1
16102	2	16112	3
16103	2	16113	2
16104	3	16114	2
16105	2	16115	2
16106	1	16116	2
16107	2		
Mean	2	Mean	2
S.D.	0.7	S.D.	0.6
16202	1	16211	1
16203	1	16212	2
16204	1	16213	1
16205	1	16214	1
		16215	1
		16216	1
		16201	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.4
16301	1	16311	1
16302	3	16312	1
16303	1	16313	1
16304	1	16314	2
16305	2	16315	2
16306	1	16316	2
		16317	2
		16318	2
Mean	2	Mean	2
S.D.	0.8	S.D.	0.5

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
6 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
16401	1	16411	1
16402	1	16412	1
16403	1	16413	1
16404	1		
16405	1		
16406	1		
16407	1		
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
16501	1	16511	1
16502	1	16512	1
16503	2	16513	1
16504	1	16514	1
16505	1		
16506	1		
16507	1		
16508	1		
Mean	1	Mean	1
S.D.	0.4	S.D.	0.0
16601	1	16611	1
16602	1	16612	1
16603	1	16613	1
16604	1	16614	1
16605	1	16615	1
		16616	1
		16617	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
16701	2	16711	2
16702	1	16712	1
16703	1	16713	2
16704	1	16714	2
16705	2		
16706	1		
Mean	1	Mean	2
S.D.	0.5	S.D.	0.5

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Mean Day of Attainment of Surface Righting Reflex
6 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
16801	1	16811	1
16802	1	16812	1
16803	2	16813	1
16804	1	16814	2
16805	1		
16806	2		
16807	1		
16808	1		
16809	1		
Mean	1	Mean	1
S.D.	0.4	S.D.	0.5
16901	1	16911	1
16902	1	16912	1
16903	1	16913	1
16904	1	16914	1
16905	1		
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
17001	2	17011	2
17002	1	17012	1
17003	1	17013	2
17004	1	17014	1
17005	1	17015	3
17006	1	17016	2
17007	1	17018	2
Mean	1	Mean	2
S.D.	0.4	S.D.	0.7
17101	1	17111	1
17102	2	17112	1
17103	1	17113	2
17104	2	17114	1
17105	1	17115	3
17106	1		
Mean	1	Mean	2
S.D.	0.5	S.D.	0.9

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Mean Day of Attainment of Surface Righting Reflex
6 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
17201	1	17211	1
17202	2	17212	1
17203	1	17213	1
17204	1	17214	1
17205	2	17215	1
17206	1	17216	1
17207	1		
17208	1		
17209	1		
Mean	1	Mean	1
S.D.	0.4	S.D.	0.0
17302	1	17311	2
17303	1	17312	1
17304	1		
17305	2		
17306	2		
17307	1		
17308	1		
Mean	1	Mean	2
S.D.	0.5	S.D.	0.7
17401	1	17411	1
17402	1	17412	1
17403	1	17413	1
17404	1	17414	1
17405	1	17415	1
17406	1	17416	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
17501	3	17511	2
17502	2	17512	1
17503	1	17513	1
17504	2	17514	2
17505	1	17515	1
		17516	1
		17517	3
		17518	1
Mean	2	Mean	2
S.D.	0.8	S.D.	0.8

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
18 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
17601	3	17611	3
17602	2	17612	2
17603	3	17614	2
17604	2	17616	1
17605	2		
17613	3		
Mean	3	Mean	2
S.D.	0.5	S.D.	0.8
17701	4	17711	4
17702	4	17712	2
17703	1	17714	2
17704	4	17715	1
		17716	3
		17718	3
		17719	2
Mean	3	Mean	2
S.D.	1.5	S.D.	1.0
17801	2	17811	2
17802	2	17812	2
17803	2	17813	2
		17814	2
		17815	2
		17816	2
		17817	2
		17818	2
Mean	2	Mean	2
S.D.	0.0	S.D.	0.0
17901	1	17911	2
17902	1	17912	2
17903	1	17913	3
17904	2		
17905	2		
17906	2		
17907	2		
17908	1		
Mean	2	Mean	2
S.D.	0.5	S.D.	0.6

ORAL PRENATAL AND POSTNATAL DEVELOPMENT STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
18 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
18001	2	18011	2
18002	2	18012	2
18003	2	18013	1
18004	2	18014	2
18005	2	18015	3
18006	2	18016	1
18007	2		
Mean	2	Mean	2
S.D.	0.0	S.D.	0.8
18101	2	18111	2
18102	2	18112	2
18103	2	18113	1
18104	2	18114	2
		18115	2
		18116	3
		18117	3
Mean	2	Mean	2
S.D.	0.0	S.D.	0.7
18201	1	18211	1
18202	1	18212	2
18203	1	18213	1
18204	1	18214	1
		18215	2
		18216	1
		18217	1
		18218	1
		18219	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.4
18301	1	18311	1
18302	1	18312	1
18303	1	18313	1
18304	1	18314	4
18305	1	18315	1
18306	1	18316	2
		18317	1
		18318	1
		18319	1
Mean	1	Mean	1
S.D.	0.0	S.D.	1.0

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Mean Day of Attainment of Surface Righting Reflex
18 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
18401	1	18411	1
18402	1	18412	2
18403	1	18413	3
18404	1	18414	1
18405	1	18415	1
18406	1	18416	1
18407	1		
Mean	1	Mean	2
S.D.	0.0	S.D.	0.8
18501	1	18511	1
18502	1	18512	1
18503	1	18513	1
18505	1	18515	1
		18516	1
		18517	3
Mean	1	Mean	1
S.D.	0.0	S.D.	0.8
18601	3	18611	2
18602	2	18612	3
18603	2	18613	3
18604	2	18614	1
18605	1	18615	2
		18616	3
Mean	2	Mean	2
S.D.	0.7	S.D.	0.8
18701	1	18711	2
18702	2	18712	1
18703	1	18713	1
18704	2	18714	2
18705	1	18715	7
18706	3		
Mean	2	Mean	3
S.D.	0.8	S.D.	2.3

ORAL PRENATAL AND POSTNATAL DEVELOPMENT STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
18 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
18801	1	18811	2
18802	1	18812	3
18803	1	18813	1
18804	1	18814	1
18805	2	18815	1
18806	1		
18807	1		
18808	1		
Mean	1	Mean	2
S.D.	0.4	S.D.	0.9
18901	3	18911	1
18902	1	18912	2
18903	1		
18904	1		
18905	1		
18906	4		
18907	4		
18908	1		
18909	1		
Mean	2	Mean	2
S.D.	1.4	S.D.	0.7
19001	1	19011	3
19002	1	19012	1
19004	1	19013	1
		19014	1
		19015	1
		19016	1
		19017	3
		19018	2
		19019	2
		19020	1
Mean	1	Mean	2
S.D.	0.0	S.D.	0.8

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
18 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
19101	1	19111	1
19102	1	19112	1
19103	2	19113	1
19104	1	19114	2
19105	1		
19106	1		
19107	1		
Mean	1	Mean	1
S.D.	0.4	S.D.	0.5
19201	1	19211	1
19202	1	19212	1
19204	1	19213	1
19205	2	19214	2
19206	1	19215	3
19207	3		
19208	1		
Mean	1	Mean	2
S.D.	0.8	S.D.	0.9
19301	1	19311	1
19302	2	19312	1
19303	1	19313	1
19304	1	19314	1
19306	1	19315	1
		19316	1
		19317	1
		19318	2
		19319	2
		19320	1
		19305	2
Mean	1	Mean	1
S.D.	0.4	S.D.	0.5
19401	1	19411	1
19402	1	19412	1
19403	1	19413	1
19404	1	19414	1
		19415	1
		19416	1
		19417	1
		19418	1
		19405	1
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Preweaning Period: Mean Day of Attainment of Surface Righting Reflex
18 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
19501	1	19511	1
19502	1	19512	1
19503	1	19513	1
19504	1	19514	1
19505	1	19515	1
19506	1		
19507	1		
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0
19601	2	19611	2
19602	1	19612	2
19603	1	19613	1
19604	1	19614	2
19605	1	19615	1
19606	1	19616	1
		19617	2
Mean	1	Mean	2
S.D.	0.4	S.D.	0.5
19701	1	19711	1
19702	1	19712	3
19703	1	19713	1
19704	3	19714	2
19705	1	19715	1
		19716	2
		19717	1
Mean	1	Mean	2
S.D.	0.9	S.D.	0.8
19801	1	19811	1
19802	1	19812	1
19803	1	19813	1
19804	1	19814	1
19805	1		
19806	1		
19807	1		
19808	1		
Mean	1	Mean	1
S.D.	0.0	S.D.	0.0

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Prewaning Period: Mean Day of Attainment of Surface Righting Reflex
18 mg base/kg/day

Male Pup #	Day	Female Pup #	Day
19901	1	19911	1
19902	1	19912	2
19903	1	19914	1
19904	1	19915	2
19905	1	19916	1
19913	1		
Mean	1	Mean	1
S.D.	0.0	S.D.	0.5
20001	2	20011	1
20002	1	20012	1
20003	2	20013	1
20004	1		
20005	1		
20006	1		
20007	2		
20008	1		
Mean	1	Mean	1
S.D.	0.5	S.D.	0.0

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
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GROUP: 1-M:0 mg base/kg/day

1011	10.0	14.0
1012	10.0	14.0
1013	10.0	14.0
1021	9.0	14.0
1023	9.0	14.0
1024	10.0	14.0
1025	10.0	14.0
1031	10.0	14.0
1032	11.0	14.0
1034	11.0	13.0
1036	11.0	14.0
1043	11.0	14.0
1045	11.0	13.0
1046	11.0	14.0
1047	9.0	14.0
1052	11.0	14.0
1053	11.0	14.0
1054	10.0	14.0
1056	11.0	14.0
1063	11.0	13.0
1064	11.0	13.0
1065	11.0	13.0
1066	12.0	14.0
1071	11.0	14.0
1072	11.0	14.0
1073	11.0	14.0
1081	9.0	13.0
1082	10.0	14.0
1083	11.0	14.0
1084	10.0	14.0
1091	10.0	13.0
1092	10.0	14.0
1095	10.0	14.0
1097	10.0	15.0
1101	10.0	14.0
1102	11.0	14.0
1104	10.0	14.0
1105	10.0	14.0
1111	8.0	14.0
1112	10.0	14.0
1113	10.0	14.0

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 1-M:0 mg base/kg/day		
1123	10.0	14.0
1125	11.0	14.0
1127	12.0	14.0
1128	12.0	14.0
1131	10.0	14.0
1134	10.0	14.0
1135	10.0	15.0
1136	10.0	15.0
1142	11.0	14.0
1146	11.0	15.0
1148	12.0	14.0
1149	12.0	14.0
1151	12.0	15.0
1152	12.0	15.0
1153	12.0	15.0
1155	12.0	15.0
1161	10.0	15.0
1162	10.0	14.0
1163	10.0	14.0
1164	10.0	15.0
1171	10.0	14.0
1173	10.0	14.0
1174	11.0	14.0
1175	10.0	14.0
1182	10.0	14.0
1185	10.0	14.0
1188	11.0	14.0
1189	10.0	14.0
1191	9.0	14.0
1192	11.0	14.0
1193	10.0	14.0
1195	11.0	14.0
1202	12.0	14.0
1203	12.0	15.0
1204	12.0	15.0
1205	12.0	15.0
1212	7.0	14.0
1214	11.0	14.0
1215	10.0	15.0
1216	10.0	14.0
1222	12.0	14.0

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a	EO ^b
	days ^c	days
GROUP: 1-M:0 mg base/kg/day		
1223	12.0	14.0
1225	12.0	15.0
1226	12.0	14.0
1231	12.0	14.0
1233	12.0	15.0
1236	12.0	15.0
1237	11.0	14.0
1242	13.0	15.0
1243	13.0	15.0
1245	12.0	16.0
1248	11.0	15.0
1251	11.0	13.0
12515	10.0	14.0
MEAN	10.7	14.1
SD	1.04	0.56
N	95	95

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 2-M:2 mg base/kg/day		
1263	11.0	14.0
1264	11.0	14.0
1266	10.0	14.0
1267	10.0	14.0
1271	9.0	15.0
1275	9.0	14.0
1277	9.0	14.0
1278	9.0	14.0
1282	11.0	14.0
1283	11.0	15.0
1284	9.0	14.0
1286	11.0	14.0
1292	11.0	13.0
1294	10.0	14.0
1295	9.0	13.0
1296	11.0	13.0
1301	9.0	14.0
1302	10.0	14.0
1307	10.0	14.0
1309	11.0	14.0
1311	11.0	13.0
1312	11.0	14.0
1313	11.0	14.0
1322	10.0	14.0
1323	10.0	14.0
1324	11.0	14.0
1325	10.0	14.0
1331	11.0	14.0
1332	10.0	14.0
1333	10.0	14.0
1341	11.0	14.0
1342	10.0	15.0
1343	10.0	14.0
1351	10.0	14.0
1352	10.0	14.0
1353	11.0	14.0
1354	10.0	14.0
1361	10.0	15.0
1362	10.0	14.0
1363	10.0	15.0
1365	10.0	14.0

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
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GROUP: 2-M:2 mg base/kg/day

1375	10.0	14.0
1376	10.0	14.0
1378	10.0	14.0
1379	10.0	14.0
1382	10.0	14.0
1383	10.0	14.0
1386	11.0	14.0
1387	10.0	14.0
1391	11.0	14.0
1392	11.0	14.0
1393	11.0	15.0
1394	11.0	14.0
1401	11.0	15.0
1402	11.0	15.0
1404	10.0	14.0
1406	10.0	15.0
1414	11.0	14.0
1415	9.0	14.0
1417	11.0	14.0
1419	10.0	13.0
1421	12.0	15.0
1426	12.0	15.0
1427	11.0	15.0
1428	12.0	15.0
1431	11.0	15.0
1432	10.0	14.0
1433	11.0	15.0
1434	10.0	15.0
1441	10.0	14.0
1442	9.0	14.0
1443	9.0	14.0
1444	9.0	14.0
1451	12.0	14.0
1452	11.0	15.0
1453	11.0	15.0
1454	12.0	14.0
1461	11.0	14.0
1463	10.0	15.0
1464	11.0	15.0
1465	11.0	14.0
1472	12.0	15.0

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

000007

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 2-M:2 mg base/kg/day		
1473	12.0	15.0
1474	12.0	15.0
1475	12.0	15.0
1481	10.0	15.0
1483	10.0	15.0
1484	9.0	15.0
1485	10.0	14.0
1491	11.0	15.0
1492	9.0	15.0
1493	11.0	15.0
1501	10.0	14.0
1502	10.0	15.0
1503	10.0	14.0
1504	10.0	14.0
MEAN	10.4	14.3
SD	0.84	0.55
N	96	96

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 3-M:6 mg base/kg/day		
1511	10.0	14.0
1513	9.0	14.0
1514	11.0	14.0
1515	11.0	14.0
1521	11.0	14.0
1523	11.0	14.0
1524	10.0	14.0
1528	10.0	14.0
1531	10.0	14.0
1532	9.0	14.0
1533	9.0	14.0
1534	10.0	14.0
1541	11.0	14.0
1542	10.0	13.0
1544	10.0	14.0
1545	11.0	14.0
1552	9.0	14.0
1554	10.0	14.0
1555	9.0	14.0
1556	10.0	14.0
1561	11.0	15.0
1564	10.0	14.0
1566	11.0	14.0
1567	10.0	14.0
1571	10.0	14.0
1572	10.0	14.0
1574	10.0	15.0
1576	10.0	14.0
1581	11.0	14.0
1583	12.0	15.0
1584	11.0	15.0
1585	11.0	15.0
1603	11.0	14.0
1604	11.0	14.0
1605	11.0	14.0
1607	10.0	15.0
1611	10.0	14.0
1612	11.0	14.0
1613	11.0	14.0
1614	11.0	14.0
1622	10.0	14.0

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DDAT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
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GROUP: 3-M:6 mg base/kg/day

1623	12.0	13.0
1624	11.0	14.0
1625	10.0	14.0
1631	10.0	14.0
1634	9.0	14.0
1635	9.0	14.0
1636	11.0	14.0
1642	12.0	14.0
1644	11.0	15.0
1646	11.0	16.0
1647	12.0	15.0
1652	12.0	15.0
1654	12.0	15.0
1655	10.0	15.0
1658	10.0	15.0
1661	11.0	15.0
1662	11.0	15.0
1664	12.0	16.0
1665	10.0	15.0
1671	10.0	15.0
1672	12.0	15.0
1673	10.0	15.0
1674	10.0	15.0
1681	11.0	14.0
1685	11.0	14.0
1687	12.0	15.0
1689	11.0	15.0
1691	12.0	15.0
1692	12.0	15.0
1693	10.0	15.0
1695	12.0	15.0
1704	11.0	14.0
1705	11.0	15.0
1706	11.0	15.0
1707	10.0	15.0
1712	11.0	14.0
1714	12.0	14.0
1715	12.0	15.0
1716	9.0	15.0
1723	13.0	14.0
1726	12.0	15.0

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
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GROUP: 3-M:6 mg base/kg/day

1727	11.0	15.0
1728	12.0	15.0
1733	10.0	14.0
1734	10.0	15.0
1735	10.0	14.0
1737	10.0	14.0
1741	11.0	14.0
1742	10.0	14.0
1743	11.0	14.0
1746	11.0	14.0
1751	9.0	14.0
1752	9.0	14.0
1754	10.0	13.0
1755	11.0	14.0

MEAN	10.6	14.4
SD	0.92	0.58
N	96	96

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
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GROUP: 4-M:18 mg base/kg/day

1761	11.0	14.0
1762	12.0	14.0
1763	12.0	14.0
1764	12.0	14.0
1771	11.0	13.0
1772	10.0	14.0
1773	11.0	14.0
1774	11.0	14.0
1781	10.0	14.0
1782	10.0	15.0
1783	11.0	14.0
1791	9.0	14.0
1792	10.0	15.0
1793	10.0	15.0
1795	9.0	14.0
1801	11.0	15.0
1804	11.0	15.0
1806	11.0	14.0
1807	11.0	15.0
1811	11.0	14.0
1812	9.0	14.0
1813	9.0	14.0
1814	9.0	13.0
1821	11.0	15.0
1822	11.0	14.0
1823	11.0	15.0
1824	10.0	15.0
1831	11.0	14.0
1833	9.0	14.0
1835	10.0	14.0
1836	10.0	14.0
1843	10.0	15.0
1844	10.0	15.0
1845	10.0	15.0
1846	10.0	14.0
1851	10.0	14.0
1852	11.0	15.0
1853	10.0	14.0
1855	11.0	15.0
1861	11.0	15.0
1863	11.0	15.0

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a days ^c	EO ^b days
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GROUP: 4-M:18 mg base/kg/day

1864	11.0	14.0
1865	11.0	15.0
1872	11.0	14.0
1873	10.0	14.0
1875	10.0	14.0
1876	10.0	14.0
1882	11.0	15.0
1883	9.0	14.0
1887	11.0	15.0
1888	11.0	14.0
1892	12.0	15.0
1894	11.0	15.0
1897	12.0	15.0
1898	12.0	15.0
1901	12.0	15.0
1902	12.0	15.0
1904	11.0	15.0
1912	10.0	14.0
1914	10.0	15.0
1916	10.0	14.0
1917	10.0	15.0
1921	12.0	15.0
1922	14.0	15.0
1924	11.0	16.0
1925	12.0	15.0
1931	11.0	15.0
1933	13.0	15.0
1934	12.0	15.0
1936	12.0	15.0
1941	10.0	14.0
1942	9.0	15.0
1943	11.0	14.0
1944	9.0	15.0
1951	11.0	15.0
1952	10.0	16.0
1953	11.0	15.0
1956	11.0	16.0
1962	11.0	16.0
1964	10.0	15.0
1965	11.0	15.0
1966	10.0	15.0

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	IA ^a	EO ^b
	days ^c	days
GROUP: 4-M:18 mg base/kg/day		
1971	12.0	15.0
1972	10.0	15.0
1973	11.0	15.0
1974	11.0	15.0
1981	11.0	14.0
1982	10.0	14.0
1985	10.0	14.0
1988	10.0	14.0
1991	12.0	16.0
1992	13.0	16.0
1993	13.0	15.0
1995	12.0	15.0
2002	10.0	14.0
2004	9.0	14.0
2005	10.0	14.0
2008	10.0	14.0
MEAN	10.7	14.6
SD	1.02	0.64
N	98	98

^aIA = Incisor Appearance

^bEO = Eyes Open

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID CA^a
 days^b

GROUP: 1-M:0 mg base/kg/day

1011	15.0
1012	15.0
1013	15.0
1021	15.0
1023	15.0
1024	15.0
1025	15.0
1031	15.0
1032	15.0
1034	15.0
1036	15.0
1043	15.0
1045	15.0
1046	15.0
1047	15.0
1052	15.0
1053	16.0
1054	15.0
1056	15.0
1063	15.0
1064	15.0
1065	15.0
1066	15.0
1071	15.0
1072	15.0
1073	15.0
1081	15.0
1082	15.0
1083	15.0
1084	15.0
1091	15.0
1092	15.0
1095	15.0
1097	15.0
1101	15.0
1102	15.0
1104	15.0
1105	15.0
1111	15.0
1112	15.0
1113	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID ^aCA
 ^bdays

GROUP: 1-M:0 mg base/kg/day

1123	15.0
1125	15.0
1127	15.0
1128	15.0
1131	15.0
1134	15.0
1135	15.0
1136	15.0
1142	15.0
1146	15.0
1148	15.0
1149	15.0
1151	15.0
1152	15.0
1153	15.0
1155	15.0
1161	15.0
1162	15.0
1163	15.0
1164	15.0
1171	15.0
1173	15.0
1174	15.0
1175	15.0
1182	15.0
1185	15.0
1188	15.0
1189	15.0
1191	15.0
1192	15.0
1193	15.0
1195	15.0
1202	15.0
1203	15.0
1204	15.0
1205	15.0
1212	15.0
1214	15.0
1215	15.0
1216	15.0
1222	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	CA ^a days ^b
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GROUP: 1-M:0 mg base/kg/day

1223	15.0
1225	15.0
1226	15.0
1231	15.0
1233	15.0
1236	15.0
1237	15.0
1242	15.0
1243	15.0
1245	16.0
1248	15.0
1251	15.0
12515	15.0

MEAN	15.0
SD	0.14
N	95

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00007

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID ^a
CA
days^b

GROUP: 2-M:2 mg base/kg/day

1263	15.0
1264	15.0
1266	15.0
1267	15.0
1271	15.0
1275	15.0
1277	15.0
1278	15.0
1282	15.0
1283	15.0
1284	15.0
1286	15.0
1292	15.0
1294	15.0
1295	15.0
1296	15.0
1301	15.0
1302	15.0
1307	16.0
1309	15.0
1311	15.0
1312	16.0
1313	15.0
1322	15.0
1323	15.0
1324	15.0
1325	15.0
1331	15.0
1332	15.0
1333	15.0
1341	15.0
1342	15.0
1343	15.0
1351	15.0
1352	15.0
1353	15.0
1354	15.0
1361	15.0
1362	15.0
1363	15.0
1365	16.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID CA^a
 days^b

GROUP: 2-M:2 mg base/kg/day

1375	15.0
1376	15.0
1378	15.0
1379	15.0
1382	15.0
1383	15.0
1386	15.0
1387	16.0
1391	15.0
1392	15.0
1393	15.0
1394	15.0
1401	15.0
1402	15.0
1404	15.0
1406	15.0
1414	15.0
1415	15.0
1417	15.0
1419	15.0
1421	15.0
1426	15.0
1427	15.0
1428	15.0
1431	15.0
1432	15.0
1433	15.0
1434	16.0
1441	15.0
1442	15.0
1443	15.0
1444	15.0
1451	15.0
1452	15.0
1453	15.0
1454	15.0
1461	15.0
1463	15.0
1464	15.0
1465	15.0
1472	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00007

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID CA^a
days^b

GROUP: 2-M:2 mg base/kg/day

1473	15.0
1474	15.0
1475	15.0
1481	15.0
1483	15.0
1484	15.0
1485	15.0
1491	15.0
1492	15.0
1493	15.0
1501	15.0
1502	15.0
1503	15.0
1504	15.0

MEAN	15.1
SD	0.22
N	96

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	CA ^a days ^b
GROUP: 3-M:6 mg base/kg/day	
1511	15.0
1513	15.0
1514	16.0
1515	15.0
1521	15.0
1523	15.0
1524	15.0
1528	15.0
1531	15.0
1532	15.0
1533	15.0
1534	15.0
1541	15.0
1542	15.0
1544	15.0
1545	15.0
1552	15.0
1554	15.0
1555	15.0
1556	15.0
1561	15.0
1564	15.0
1566	15.0
1567	15.0
1571	15.0
1572	15.0
1574	15.0
1576	15.0
1581	15.0
1583	16.0
1584	15.0
1585	15.0
1603	15.0
1604	15.0
1605	16.0
1607	15.0
1611	15.0
1612	15.0
1613	15.0
1614	15.0
1622	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID CA^a
 days^b

GROUP: 3-M:6 mg base/kg/day

1623	15.0
1624	15.0
1625	15.0
1631	15.0
1634	15.0
1635	15.0
1636	15.0
1642	15.0
1644	15.0
1646	16.0
1647	15.0
1652	15.0
1654	15.0
1655	15.0
1658	15.0
1661	15.0
1662	15.0
1664	16.0
1665	15.0
1671	15.0
1672	15.0
1673	15.0
1674	15.0
1681	15.0
1685	15.0
1687	15.0
1689	15.0
1691	15.0
1692	15.0
1693	15.0
1695	15.0
1704	15.0
1705	15.0
1706	15.0
1707	15.0
1712	15.0
1714	15.0
1715	15.0
1716	15.0
1723	15.0
1726	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	CA ^a days ^b
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GROUP: 3-M:6 mg base/kg/day

1727	15.0
1728	15.0
1733	15.0
1734	15.0
1735	15.0
1737	15.0
1741	15.0
1742	15.0
1743	15.0
1746	15.0
1751	15.0
1752	15.0
1754	15.0
1755	15.0

MEAN	15.1
SD	0.22
N	96

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID CA^a
 days^b

GROUP: 4-M:18 mg base/kg/day

1761	15.0
1762	15.0
1763	15.0
1764	15.0
1771	15.0
1772	15.0
1773	15.0
1774	15.0
1781	15.0
1782	16.0
1783	15.0
1791	15.0
1792	15.0
1793	16.0
1795	15.0
1801	15.0
1804	15.0
1806	15.0
1807	15.0
1811	15.0
1812	15.0
1813	15.0
1814	15.0
1821	15.0
1822	15.0
1823	15.0
1824	15.0
1831	15.0
1833	15.0
1835	15.0
1836	15.0
1843	15.0
1844	15.0
1845	15.0
1846	15.0
1851	15.0
1852	15.0
1853	15.0
1855	15.0
1861	15.0
1863	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	CA ^a days ^b
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GROUP: 4-M:18 mg base/kg/day

1864	15.0
1865	15.0
1872	15.0
1873	15.0
1875	15.0
1876	15.0
1882	15.0
1883	15.0
1887	15.0
1888	15.0
1892	15.0
1894	15.0
1897	15.0
1898	15.0
1901	15.0
1902	15.0
1904	15.0
1912	15.0
1914	15.0
1916	15.0
1917	15.0
1921	15.0
1922	15.0
1924	16.0
1925	15.0
1931	15.0
1933	15.0
1934	15.0
1936	15.0
1941	15.0
1942	15.0
1943	15.0
1944	15.0
1951	15.0
1952	16.0
1953	15.0
1956	16.0
1962	16.0
1964	15.0
1965	15.0
1966	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	CA ^a days ^b
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GROUP: 4-M:18 mg base/kg/day

1971	15.0
1972	15.0
1973	15.0
1974	15.0
1981	15.0
1982	15.0
1985	15.0
1988	15.0
1991	16.0
1992	16.0
1993	15.0
1995	15.0
2002	15.0
2004	15.0
2005	15.0
2008	15.0

MEAN	15.1
SD	0.28
N	98

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY 10: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
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GROUP: 1-F:0 mg base/kg/day

10112	10.0	14.0
10113	10.0	13.0
10115	10.0	14.0
10117	10.0	14.0
10214	9.0	14.0
10215	9.0	14.0
10217	10.0	14.0
10218	9.0	14.0
10312	10.0	15.0
10313	11.0	14.0
10315	10.0	14.0
10318	11.0	14.0
10411	11.0	13.0
10412	11.0	14.0
10413	10.0	14.0
10415	9.0	14.0
10511	11.0	14.0
10512	11.0	15.0
10513	9.0	15.0
10611	11.0	13.0
10614	10.0	13.0
10615	11.0	14.0
10616	11.0	13.0
10711	11.0	14.0
10712	10.0	14.0
10713	11.0	14.0
10714	11.0	14.0
10811	10.0	13.0
10813	10.0	13.0
10815	9.0	14.0
10816	10.0	14.0
10911	10.0	14.0
11011	9.0	14.0
11012	10.0	14.0
11014	10.0	14.0
11015	10.0	14.0
11111	10.0	14.0
11113	11.0	15.0
11116	10.0	15.0
11117	10.0	14.0
11211	10.0	14.0

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 1-F:0 mg base/kg/day		
11212	11.0	14.0
11213	10.0	14.0
11311	10.0	14.0
11312	10.0	14.0
11315	10.0	15.0
11316	11.0	14.0
11411	12.0	14.0
11412	11.0	14.0
11413	11.0	14.0
11414	12.0	13.0
11511	11.0	15.0
11513	12.0	14.0
11514	11.0	15.0
11519	12.0	15.0
11611	11.0	14.0
11612	10.0	14.0
11616	11.0	15.0
11617	10.0	14.0
11711	10.0	14.0
11712	11.0	14.0
11811	9.0	14.0
11812	10.0	14.0
11813	9.0	14.0
11814	9.0	14.0
11911	11.0	14.0
11913	11.0	14.0
11914	11.0	14.0
11915	11.0	15.0
12012	12.0	14.0
12013	11.0	14.0
12015	12.0	15.0
12016	12.0	14.0
12111	9.0	14.0
12113	10.0	14.0
12114	11.0	14.0
12117	10.0	14.0
12211	10.0	15.0
12212	11.0	15.0
12213	12.0	14.0
12311	12.0	15.0
12312	11.0	14.0

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

D E A T T

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 1-F:0 mg base/kg/day		
12313	11.0	14.0
12314	11.0	14.0
12411	13.0	15.0
12413	12.0	15.0
12415	12.0	15.0
12416	11.0	15.0
12511	11.0	14.0
12518	11.0	14.0
12519	10.0	14.0
12520	10.0	13.0
MEAN	10.5	14.1
SD	0.90	0.54
N	92	92

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
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GROUP: 2-F:2 mg base/kg/day

12611	11.0	14.0
12612	11.0	14.0
12711	10.0	15.0
12712	9.0	13.0
12715	9.0	15.0
12716	9.0	14.0
12811	9.0	14.0
12813	11.0	13.0
12814	9.0	14.0
12815	11.0	14.0
12911	11.0	13.0
12912	10.0	13.0
12913	9.0	13.0
13011	10.0	14.0
13012	10.0	13.0
13013	11.0	13.0
13014	10.0	14.0
13113	9.0	14.0
13114	10.0	14.0
13115	11.0	14.0
13119	11.0	14.0
13211	10.0	14.0
13212	11.0	14.0
13213	11.0	14.0
13311	10.0	14.0
13315	10.0	14.0
13317	11.0	13.0
13318	11.0	14.0
13412	10.0	14.0
13413	8.0	14.0
13414	8.0	13.0
13417	10.0	14.0
13512	11.0	14.0
13513	10.0	14.0
13514	10.0	14.0
13515	10.0	14.0
13612	10.0	14.0
13614	10.0	14.0
13615	10.0	14.0
13616	10.0	14.0
13711	8.0	14.0

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 2-F:2 mg base/kg/day		
13713	10.0	14.0
13811	10.0	14.0
13812	9.0	13.0
13814	11.0	14.0
13815	10.0	13.0
13911	10.0	14.0
13912	11.0	14.0
13913	10.0	14.0
13916	10.0	14.0
14011	10.0	14.0
14012	11.0	15.0
14014	11.0	14.0
14015	11.0	14.0
14111	9.0	13.0
14112	11.0	13.0
14211	11.0	15.0
14212	12.0	15.0
14213	12.0	15.0
14314	11.0	15.0
14315	10.0	15.0
14316	11.0	15.0
14317	11.0	15.0
14412	11.0	14.0
14414	9.0	14.0
14416	9.0	14.0
14417	9.0	14.0
14511	11.0	14.0
14512	11.0	14.0
14514	11.0	15.0
14516	12.0	15.0
14612	11.0	15.0
14613	11.0	14.0
14614	11.0	15.0
14615	11.0	15.0
14712	12.0	15.0
14713	12.0	15.0
14714	11.0	15.0
14715	12.0	15.0
14811	9.0	14.0
14812	10.0	14.0
14813	10.0	14.0

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEAT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a	EO ^b
	days ^c	days
GROUP: 2-F:2 mg base/kg/day		
14816	11.0	14.0
14912	9.0	15.0
14913	10.0	14.0
14914	10.0	15.0
14916	10.0	14.0
15011	10.0	14.0
15013	10.0	15.0
15014	10.0	15.0
15015	10.0	15.0
MEAN	10.3	14.1
SD	0.92	0.63
N	91	91

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 3-F:6 mg base/kg/day		
15111	10.0	14.0
15112	11.0	14.0
15114	10.0	14.0
15115	10.0	14.0
15211	9.0	14.0
15212	9.0	14.0
15213	10.0	15.0
15215	9.0	14.0
15311	10.0	15.0
15313	10.0	14.0
15314	10.0	13.0
15315	10.0	14.0
15412	11.0	14.0
15413	11.0	14.0
15415	11.0	14.0
15416	10.0	13.0
15511	10.0	14.0
15513	9.0	14.0
15515	9.0	14.0
15518	9.0	14.0
15611	10.0	14.0
15614	11.0	14.0
15615	10.0	14.0
15617	9.0	13.0
15712	11.0	15.0
15714	11.0	14.0
15716	10.0	13.0
15717	10.0	14.0
15812	11.0	15.0
15813	11.0	14.0
15814	11.0	14.0
15816	11.0	15.0
16011	11.0	15.0
16013	11.0	15.0
16014	10.0	14.0
16015	12.0	14.0
16111	10.0	14.0
16112	11.0	14.0
16113	11.0	14.0
16114	11.0	13.0
16211	10.0	13.0

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 3-F:6 mg base/kg/day		
16214	12.0	13.0
16215	10.0	14.0
16216	12.0	14.0
16311	10.0	14.0
16313	9.0	14.0
16314	10.0	14.0
16316	9.0	14.0
16412	12.0	15.0
16413	10.0	15.0
16511	10.0	15.0
16512	10.0	15.0
16513	12.0	15.0
16514	10.0	15.0
16613	10.0	15.0
16614	10.0	15.0
16615	10.0	15.0
16617	11.0	15.0
16711	12.0	15.0
16712	10.0	15.0
16713	10.0	15.0
16714	10.0	15.0
16811	12.0	14.0
16812	10.0	14.0
16813	12.0	14.0
16814	11.0	14.0
16911	10.0	15.0
16912	11.0	14.0
16913	12.0	15.0
16914	12.0	15.0
17014	11.0	14.0
17015	11.0	15.0
17016	11.0	14.0
17018	10.0	14.0
17111	11.0	14.0
17112	11.0	14.0
17114	11.0	14.0
17115	11.0	14.0
17212	12.0	15.0
17214	11.0	14.0
17215	11.0	14.0
17216	11.0	15.0

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 3-F:6 mg base/kg/day		
17311	10.0	14.0
17312	11.0	14.0
17411	10.0	14.0
17412	10.0	13.0
17413	11.0	14.0
17414	11.0	13.0
17511	10.0	14.0
17513	10.0	14.0
17515	10.0	14.0
17516	11.0	14.0
MEAN	10.5	14.2
SD	0.83	0.60
N	92	92

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 4-F:18 mg base/kg/day		
17611	12.0	14.0
17612	12.0	14.0
17614	11.0	14.0
17616	12.0	14.0
17712	9.0	14.0
17713	10.0	13.0
17715	11.0	14.0
17718	9.0	13.0
17811	10.0	14.0
17815	11.0	14.0
17816	10.0	14.0
17818	10.0	14.0
17911	10.0	14.0
17912	10.0	15.0
17913	10.0	15.0
18012	11.0	15.0
18013	10.0	14.0
18014	11.0	15.0
18016	11.0	14.0
18112	11.0	14.0
18114	10.0	13.0
18115	11.0	14.0
18116	9.0	14.0
18213	12.0	14.0
18214	12.0	15.0
18216	11.0	15.0
18218	12.0	15.0
18312	12.0	15.0
18315	12.0	14.0
18316	10.0	14.0
18317	10.0	14.0
18411	10.0	15.0
18412	10.0	15.0
18414	11.0	15.0
18416	9.0	14.0
18511	10.0	14.0
18512	10.0	14.0
18515	11.0	14.0
18516	11.0	14.0
18611	11.0	14.0
18613	11.0	14.0

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^c	EO ^b days
GROUP: 4-F:18 mg base/kg/day		
18614	11.0	15.0
18615	11.0	15.0
18712	10.0	14.0
18713	10.0	14.0
18714	11.0	14.0
18715	10.0	14.0
18811	11.0	14.0
18812	12.0	15.0
18813	10.0	14.0
18815	11.0	14.0
18911	13.0	15.0
18912	12.0	15.0
18914	--	--
19012	11.0	15.0
19018	12.0	15.0
19019	12.0	15.0
19020	11.0	15.0
19111	11.0	14.0
19112	11.0	14.0
19113	10.0	14.0
19114	11.0	14.0
19212	13.0	15.0
19213	12.0	16.0
19214	13.0	15.0
19215	12.0	15.0
19311	12.0	15.0
19315	11.0	14.0
19316	10.0	14.0
19317	12.0	15.0
19413	9.0	15.0
19415	11.0	14.0
19416	10.0	14.0
19417	9.0	14.0
19511	11.0	16.0
19512	11.0	16.0
19513	11.0	15.0
19514	10.0	16.0
19611	10.0	15.0
19613	12.0	16.0

(--) - Data Unavailable

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00007

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	IA ^a days ^b	EO ^b days
GROUP: 4-F:18 mg base/kg/day		
19615	10.0	15.0
19617	10.0	15.0
19712	13.0	15.0
19714	11.0	15.0
19715	11.0	15.0
19716	11.0	15.0
19811	10.0	14.0
19812	11.0	14.0
19813	9.0	15.0
19814	9.0	14.0
19911	11.0	15.0
19912	11.0	15.0
19914	13.0	15.0
19915	11.0	15.0
20011	9.0	14.0
20012	10.0	14.0
20013	10.0	14.0
MEAN	10.8	14.5
SD	1.01	0.65
N	96	96

^aIA = Incisor Appearance.

^bEO = Eyes Open.

^cdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID CA^a
days^b

GROUP: 1-F:0 mg base/kg/day

10112	15.0
10113	15.0
10115	15.0
10117	16.0
10214	15.0
10215	15.0
10217	15.0
10218	15.0
10312	15.0
10313	15.0
10315	15.0
10318	15.0
10411	15.0
10412	15.0
10413	15.0
10415	15.0
10511	15.0
10512	15.0
10513	16.0
10611	15.0
10614	15.0
10615	15.0
10616	15.0
10711	15.0
10712	15.0
10713	15.0
10714	15.0
10811	15.0
10813	15.0
10815	15.0
10816	16.0
10911	15.0
11011	15.0
11012	15.0
11014	15.0
11015	15.0
11111	15.0
11113	15.0
11116	15.0
11117	15.0
11211	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID CA^a
 days^b

GROUP: 1-F:0 mg base/kg/day

11212	15.0
11213	15.0
11311	15.0
11312	15.0
11315	15.0
11316	15.0
11411	15.0
11412	15.0
11413	15.0
11414	15.0
11511	15.0
11513	15.0
11514	15.0
11519	15.0
11611	15.0
11612	15.0
11616	15.0
11617	15.0
11711	15.0
11712	15.0
11811	15.0
11812	15.0
11813	15.0
11814	15.0
11911	15.0
11913	15.0
11914	15.0
11915	15.0
12012	15.0
12013	15.0
12015	15.0
12016	15.0
12111	15.0
12113	15.0
12114	15.0
12117	15.0
12211	15.0
12212	15.0
12213	15.0
12311	15.0
12312	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

D C A T T

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID CA^a
days^b

GROUP: 1-F:0 mg base/kg/day

12313	15.0
12314	15.0
12411	15.0
12413	15.0
12415	15.0
12416	15.0
12511	15.0
12518	15.0
12519	15.0
12520	15.0

MEAN	15.0
SD	0.18
N	92

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID CA^a
days^b

GROUP: 2-F:2 mg base/kg/day

12611	15.0
12612	15.0
12711	15.0
12712	15.0
12715	15.0
12716	15.0
12811	15.0
12813	15.0
12814	15.0
12815	15.0
12911	15.0
12912	15.0
12913	15.0
13011	15.0
13012	16.0
13013	15.0
13014	15.0
13113	15.0
13114	15.0
13115	15.0
13119	15.0
13211	15.0
13212	15.0
13213	15.0
13311	15.0
13315	15.0
13317	15.0
13318	15.0
13412	15.0
13413	15.0
13414	15.0
13417	15.0
13512	15.0
13513	15.0
13514	15.0
13515	15.0
13612	15.0
13614	15.0
13615	15.0
13616	15.0
13711	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID CA^a
 days^b

GROUP: 2-F:2 mg base/kg/day

13713	15.0
13811	15.0
13812	15.0
13814	15.0
13815	15.0
13911	15.0
13912	15.0
13913	15.0
13916	15.0
14011	15.0
14012	15.0
14014	15.0
14015	15.0
14111	15.0
14112	15.0
14211	15.0
14212	15.0
14213	15.0
14314	15.0
14315	15.0
14316	15.0
14317	15.0
14412	15.0
14414	15.0
14416	15.0
14417	15.0
14511	15.0
14512	15.0
14514	15.0
14516	15.0
14612	15.0
14613	15.0
14614	15.0
14615	15.0
14712	15.0
14713	15.0
14714	15.0
14715	15.0
14811	15.0
14812	15.0
14813	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	CA ^a days ^b
-----------	--------------------------------------

GROUP: 2-F:2 mg base/kg/day

14816	15.0
14912	15.0
14913	15.0
14914	15.0
14916	15.0
15011	15.0
15013	15.0
15014	15.0
15015	15.0

MEAN	15.0
SD	0.10
N	91

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID CA^a
days^b

GROUP: 3-F:6 mg base/kg/day

15111	15.0
15112	15.0
15114	15.0
15115	15.0
15211	15.0
15212	15.0
15213	17.0
15215	15.0
15311	15.0
15313	15.0
15314	15.0
15315	15.0
15412	15.0
15413	15.0
15415	15.0
15416	15.0
15511	15.0
15513	15.0
15515	15.0
15518	15.0
15611	15.0
15614	15.0
15615	15.0
15617	15.0
15712	15.0
15714	15.0
15716	15.0
15717	15.0
15812	15.0
15813	15.0
15814	15.0
15816	15.0
16011	15.0
16013	15.0
16014	15.0
16015	15.0
16111	15.0
16112	15.0
16113	15.0
16114	15.0
16211	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEALT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	CA ^a days ^b
-----------	--------------------------------------

GROUP: 3-F:6 mg base/kg/day

16214	15.0
16215	15.0
16216	15.0
16311	15.0
16313	15.0
16314	15.0
16316	15.0
16412	15.0
16413	15.0
16511	15.0
16512	15.0
16513	15.0
16514	15.0
16613	15.0
16614	15.0
16615	15.0
16617	15.0
16711	15.0
16712	15.0
16713	15.0
16714	15.0
16811	15.0
16812	15.0
16813	15.0
16814	15.0
16911	15.0
16912	15.0
16913	15.0
16914	15.0
17014	15.0
17015	15.0
17016	15.0
17018	15.0
17111	15.0
17112	15.0
17114	15.0
17115	15.0
17212	15.0
17214	15.0
17215	15.0
17216	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DDA77

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	CA ^a days ^b
-----------	--------------------------------------

GROUP: 3-F:6 mg base/kg/day

17311	15.0
17312	15.0
17411	15.0
17412	15.0
17413	15.0
17414	15.0
17511	15.0
17513	15.0
17515	15.0
17516	15.0

MEAN	15.0
SD	0.21
N	92

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	^a CA days ^b
GROUP: 4-F:18 mg base/kg/day	
17611	15.0
17612	15.0
17614	15.0
17616	15.0
17712	15.0
17713	15.0
17715	15.0
17718	15.0
17811	15.0
17815	15.0
17816	15.0
17818	15.0
17911	15.0
17912	15.0
17913	15.0
18012	15.0
18013	15.0
18014	15.0
18016	15.0
18112	15.0
18114	15.0
18115	15.0
18116	15.0
18213	15.0
18214	15.0
18216	15.0
18218	15.0
18312	15.0
18315	15.0
18316	15.0
18317	15.0
18411	15.0
18412	15.0
18414	15.0
18416	15.0
18511	15.0
18512	15.0
18515	15.0
18516	15.0
18611	15.0
18613	15.0

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID CA^a
 days^b

GROUP: 4-F:18 mg base/kg/day

18614	15.0
18615	15.0
18712	15.0
18713	15.0
18714	15.0
18715	15.0
18811	15.0
18812	15.0
18813	15.0
18815	15.0
18911	15.0
18912	15.0
18914	--
19012	15.0
19018	15.0
19019	15.0
19020	15.0
19111	15.0
19112	15.0
19113	15.0
19114	15.0
19212	15.0
19213	16.0
19214	15.0
19215	15.0
19311	15.0
19315	15.0
19316	15.0
19317	15.0
19413	15.0
19415	15.0
19416	15.0
19417	15.0
19511	16.0
19512	16.0
19513	15.0
19514	16.0
19611	15.0
19613	16.0

(--) - Data Unavailable

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEPT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID ^a
CA
days^b

GROUP: 4-F:18 mg base/kg/day

19615	15.0
19617	15.0
19712	15.0
19714	15.0
19715	15.0
19716	15.0
19811	15.0
19812	15.0
19813	15.0
19814	15.0
19911	15.0
19912	15.0
19914	15.0
19915	15.0
20011	15.0
20012	15.0
20013	15.0

MEAN	15.1
SD	0.22
N	96

^aCA = Cliff Avoidance.

^bdays = Day the pup attained the developmental parameter.

DECAT

POSTWEANING PERIOD: INDIVIDUAL ANIMAL DATA FOR
MEAN DAY OF ATTAINMENT OF DEVELOPMENTAL PARAMETERS
(Vaginal Opening and Preputial Separation)

Note: During the postweaning period, the individual animal was the experimental unit.

Unless stated otherwise, the notation "(--)" - Data Unavailable" indicates an animal not selected for postweaning assessment

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 1-F:0 mg base/kg/day

10112	33.0
10113	33.0
10115	--
10117	--
10214	33.0
10215	--
10217	32.0
10218	--
10312	--
10313	--
10315	34.0
10318	34.0
10411	--
10412	34.0
10413	31.0
10415	--
10511	32.0
10512	--
10513	32.0
10611	--
10614	33.0
10615	--
10616	33.0
10711	--
10712	33.0
10713	31.0
10714	--
10811	--
10813	32.0
10815	32.0
10816	--
10911	30.0
11011	--
11012	31.0
11014	--
11015	32.0
11111	32.0
11113	--
11116	--

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEAST

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 1-F:0 mg base/kg/day

11117	34.0
11211	--
11212	31.0
11213	31.0
11311	--
11312	--
11315	31.0
11316	32.0
11411	--
11412	33.0
11413	--
11414	32.0
11511	33.0
11513	--
11514	--
11519	33.0
11611	32.0
11612	33.0
11616	--
11617	--
11711	31.0
11712	31.0
11811	--
11812	33.0
11813	--
11814	33.0
11911	31.0
11913	--
11914	--
11915	34.0
12012	31.0
12013	35.0
12015	--
12016	--
12111	--
12113	31.0
12114	31.0
12117	--
12211	35.0

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 1-F:0 mg base/kg/day

12212	--
12213	33.0
12311	--
12312	34.0
12313	34.0
12314	--
12411	33.0
12413	33.0
12415	--
12416	--
12511	33.0
12518	--
12519	32.0
12520	--

MEAN	32.4
SD	1.19
N	49

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

000001

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 2-F:2 mg base/kg/day

12611	29.0
12612	29.0
12711	--
12712	--
12715	32.0
12716	33.0
12811	--
12813	29.0
12814	--
12815	33.0
12911	32.0
12912	33.0
12913	--
13011	32.0
13012	--
13013	31.0
13014	--
13113	33.0
13114	33.0
13115	--
13119	--
13211	--
13212	32.0
13213	31.0
13311	--
13315	32.0
13317	31.0
13318	--
13412	34.0
13413	--
13414	31.0
13417	--
13512	31.0
13513	--
13514	--
13515	31.0
13612	30.0
13614	32.0
13615	--

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY 10: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 2-F:2 mg base/kg/day

13616	--
13711	32.0
13713	34.0
13811	31.0
13812	--
13814	--
13815	28.0
13911	--
13912	32.0
13913	31.0
13916	--
14011	33.0
14012	--
14014	34.0
14015	--
14111	31.0
14112	32.0
14211	--
14212	32.0
14213	33.0
14314	32.0
14315	35.0
14316	--
14317	--
14412	31.0
14414	--
14416	31.0
14417	--
14511	34.0
14512	--
14514	33.0
14516	--
14612	--
14613	31.0
14614	--
14615	32.0
14712	33.0
14713	--
14714	32.0

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	VA ^a days ^b
-----------	--------------------------------------

GROUP: 2-F:2 mg base/kg/day

14715	--
14811	33.0
14812	32.0
14813	--
14816	--
14912	--
14913	32.0
14914	--
14916	33.0
15011	32.0
15013	32.0
15014	--
15015	--

MEAN	31.9
SD	1.39
N	50

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEATH

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 3-F:6 mg base/kg/day

15111	--
15112	32.0
15114	--
15115	30.0
15211	32.0
15212	--
15213	33.0
15215	--
15311	--
15313	33.0
15314	32.0
15315	--
15412	33.0
15413	--
15415	--
15416	32.0
15511	--
15513	32.0
15515	--
15518	32.0
15611	32.0
15614	--
15615	--
15617	32.0
15712	34.0
15714	31.0
15716	--
15717	--
15812	--
15813	--
15814	33.0
15816	34.0
16011	31.0
16013	--
16014	--
16015	32.0
16111	--
16112	--
16113	31.0

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 3-F:6 mg base/kg/day

16114	32.0
16211	32.0
16214	--
16215	--
16216	32.0
16311	32.0
16313	32.0
16314	--
16316	--
16412	33.0
16413	31.0
16511	--
16512	--
16513	31.0
16514	35.0
16613	34.0
16614	32.0
16615	--
16617	--
16711	32.0
16712	--
16713	--
16714	32.0
16811	--
16812	--
16813	31.0
16814	33.0
16911	32.0
16912	--
16913	31.0
16914	--
17014	--
17015	--
17016	31.0
17018	32.0
17111	31.0
17112	--
17114	--
17115	31.0

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 3-F:6 mg base/kg/day

17212	34.0
17214	--
17215	33.0
17216	--
17311	33.0
17312	32.0
17411	33.0
17412	--
17413	31.0
17414	--
17511	--
17513	31.0
17515	--
17516	31.0

MEAN	32.1
SD	1.04
N	48

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DATA

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 4-F:18 mg base/kg/day

17611	--
17612	--
17614	33.0
17616	34.0
17712	32.0
17713	31.0
17715	--
17718	--
17811	--
17815	32.0
17816	32.0
17818	--
17911	31.0
17912	31.0
17913	--
18012	--
18013	33.0
18014	31.0
18016	--
18112	32.0
18114	--
18115	--
18116	32.0
18213	32.0
18214	32.0
18216	--
18218	--
18312	--
18315	31.0
18316	--
18317	31.0
18411	34.0
18412	--
18414	--
18416	31.0
18511	31.0
18512	--
18515	32.0
18516	--

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 4-F:18 mg base/kg/day

18611	32.0
18613	31.0
18614	--
18615	--
18712	32.0
18713	--
18714	31.0
18715	--
18811	--
18812	31.0
18813	--
18815	32.0
18911	32.0
18912	34.0
18914	--
19012	33.0
19018	--
19019	34.0
19020	--
19111	--
19112	35.0
19113	--
19114	36.0
19212	--
19213	--
19214	34.0
19215	33.0
19311	--
19315	32.0
19316	--
19317	32.0
19413	--
19415	31.0
19416	31.0
19417	--
19511	--
19512	33.0
19513	--
19514	33.0

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID VA^a
 days^b

GROUP: 4-F:18 mg base/kg/day

19611	--
19613	32.0
19615	--
19617	33.0
19712	--
19714	--
19715	33.0
19716	32.0
19811	--
19812	32.0
19813	--
19814	32.0
19911	--
19912	34.0
19914	--
19915	33.0
20011	30.0
20012	31.0
20013	--

MEAN	32.2
SD	1.22
N	50

(--) - Data Unavailable

^aVA = Vaginal Opening.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID PS^a
 days^b

GROUP: 1-M:0 mg base/kg/day

1011	38.0
1012	--
1013	38.0
1021	37.0
1023	--
1024	38.0
1025	--
1031	--
1032	38.0
1034	--
1036	38.0
1043	38.0
1045	--
1046	--
1047	38.0
1052	37.0
1053	--
1054	37.0
1056	--
1063	--
1064	--
1065	40.0
1066	37.0
1071	39.0
1072	37.0
1073	--
1081	--
1082	--
1083	36.0
1084	37.0
1091	37.0
1092	--
1095	--
1097	37.0
1101	--
1102	37.0
1104	37.0
1105	--
1111	--

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID PS^a
days^b

GROUP: 1-M:0 mg base/kg/day

1112	37.0
1113	36.0
1123	--
1125	36.0
1127	37.0
1128	--
1131	--
1134	--
1135	36.0
1136	37.0
1142	--
1146	43.0
1148	42.0
1149	--
1151	--
1152	39.0
1153	40.0
1155	--
1161	38.0
1162	38.0
1163	--
1164	--
1171	--
1173	41.0
1174	38.0
1175	--
1182	--
1185	41.0
1188	--
1189	38.0
1191	--
1192	41.0
1193	38.0
1195	--
1202	43.0
1203	41.0
1204	--
1205	--
1212	--

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PS ^a days ^b
GROUP: 1-M:0 mg base/kg/day	
1214	40.0
1215	41.0
1216	--
1222	--
1223	42.0
1225	--
1226	42.0
1231	--
1233	43.0
1236	42.0
1237	--
1242	42.0
1243	--
1245	--
1248	42.0
1251	42.0
12515	37.0
MEAN	38.9
SD	2.20
N	50

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PS ^a days ^b
GROUP: 2-M:2 mg base/kg/day	
1263	--
1264	40.0
1266	--
1267	37.0
1271	--
1275	38.0
1277	40.0
1278	--
1282	--
1283	37.0
1284	--
1286	38.0
1292	--
1294	--
1295	38.0
1296	39.0
1301	--
1302	--
1307	37.0
1309	40.0
1311	38.0
1312	38.0
1313	--
1322	37.0
1323	37.0
1324	--
1325	--
1331	37.0
1332	--
1333	37.0
1341	37.0
1342	--
1343	36.0
1351	--
1352	--
1353	37.0
1354	36.0
1361	38.0
1362	--

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00007

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID PS^a
 days^b

GROUP: 2-M:2 mg base/kg/day

1363	--
1365	37.0
1375	36.0
1376	--
1378	--
1379	37.0
1382	41.0
1383	37.0
1386	--
1387	--
1391	--
1392	39.0
1393	--
1394	38.0
1401	40.0
1402	--
1404	39.0
1406	--
1414	41.0
1415	38.0
1417	--
1419	--
1421	43.0
1426	--
1427	--
1428	44.0
1431	--
1432	40.0
1433	--
1434	44.0
1441	--
1442	--
1443	38.0
1444	38.0
1451	--
1452	38.0
1453	--
1454	42.0
1461	40.0

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID PS^a
 days^b

GROUP: 2-M:2 mg base/kg/day

1463	40.0
1464	--
1465	--
1472	--
1473	--
1474	39.0
1475	41.0
1481	--
1483	38.0
1484	41.0
1485	--
1491	38.0
1492	--
1493	38.0
1501	38.0
1502	--
1503	39.0
1504	--

MEAN	38.7
SD	1.93
N	50

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DDA37

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID PS^a
 days^b

GROUP: 3-M:6 mg base/kg/day

1511	41.0
1513	--
1514	--
1515	38.0
1521	--
1523	41.0
1524	41.0
1528	--
1531	--
1532	41.0
1533	38.0
1534	--
1541	--
1542	38.0
1544	38.0
1545	--
1552	--
1554	40.0
1555	40.0
1556	--
1561	39.0
1564	--
1566	38.0
1567	--
1571	37.0
1572	--
1574	37.0
1576	--
1581	--
1583	--
1584	39.0
1585	38.0
1603	38.0
1604	--
1605	37.0
1607	--
1611	38.0
1612	38.0
1613	--

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PS ^a days ^b
GROUP: 3-M:6 mg base/kg/day	
1614	--
1622	36.0
1623	--
1624	--
1625	39.0
1631	--
1634	42.0
1635	--
1636	41.0
1642	--
1644	39.0
1646	42.0
1647	--
1652	40.0
1654	--
1655	--
1658	39.0
1661	43.0
1662	--
1664	42.0
1665	--
1671	--
1672	43.0
1673	42.0
1674	--
1681	42.0
1685	41.0
1687	--
1689	--
1691	40.0
1692	40.0
1693	--
1695	--
1704	37.0
1705	--
1706	38.0
1707	--
1712	--
1714	42.0

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DDAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID PS^a
 days^b

GROUP: 3-M:6 mg base/kg/day

1715	40.0
1716	--
1723	42.0
1726	--
1727	39.0
1728	--
1733	41.0
1734	40.0
1735	--
1737	--
1741	38.0
1742	--
1743	38.0
1746	--
1751	--
1752	--
1754	42.0
1755	42.0

MEAN	39.7
SD	1.86
N	48

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID PS^a
 days^b

GROUP: 4-M:18 mg base/kg/day

1761	--
1762	39.0
1763	38.0
1764	--
1771	--
1772	--
1773	40.0
1774	38.0
1781	--
1782	40.0
1783	38.0
1791	--
1792	37.0
1793	--
1795	37.0
1801	44.0
1804	--
1806	38.0
1807	--
1811	--
1812	--
1813	37.0
1814	38.0
1821	--
1822	--
1823	37.0
1824	37.0
1831	38.0
1833	--
1835	37.0
1836	--
1843	--
1844	--
1845	38.0
1846	37.0
1851	--
1852	37.0
1853	37.0
1855	--

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID PS^a
 days^b

GROUP: 4-M:18 mg base/kg/day

1861	37.0
1863	--
1864	--
1865	36.0
1872	--
1873	40.0
1875	37.0
1876	--
1882	41.0
1883	40.0
1887	--
1888	--
1892	--
1894	41.0
1897	42.0
1898	--
1901	43.0
1902	--
1904	39.0
1912	40.0
1914	42.0
1916	--
1917	--
1921	44.0
1922	--
1924	45.0
1925	--
1931	--
1933	--
1934	40.0
1936	39.0
1941	42.0
1942	41.0
1943	--
1944	--
1951	--
1952	44.0
1953	--
1956	43.0

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEAT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID ^aPS
 days^b

GROUP: 4-M:18 mg base/kg/day

1962	38.0
1964	--
1965	43.0
1966	--
1971	--
1972	40.0
1973	--
1974	41.0
1981	--
1982	40.0
1985	--
1988	39.0
1991	44.0
1992	--
1993	44.0
1995	--
2002	--
2004	--
2005	41.0
2008	41.0

MEAN	39.8
SD	2.47
N	50

(--) - Data Unavailable

^aPS = Preputial Separation.

^bdays = Day the animal attained the developmental parameter.

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APPENDIX K

INDIVIDUAL F₁ GENERATION FUNCTIONAL OBSERVATIONAL BATTERY OBSERVATIONS

Note: Unless stated otherwise, the notation "(--)" - Data Unavailable" indicates an animal not selected for postweaning assessment

FUNCTIONAL OBSERVATIONAL BATTERY

Study No.: _____ Animal No.: _____ Sex: _____ Time: 00:00:00
Date: _____ Study Day: _____ Performed By: _____ Recorded By: _____

HOME CAGE OBSERVATIONS (30sec)

Posture: (choose one)

1. asleep, lying on side or curled up
2. lying on side, resting but awake
3. sitting or standing normally
4. rearing
5. hunched over

Palpebral Closure: (choose one)

1. eyelids wide open
2. eyelids slightly drooping
3. ptosis: drooping eyelids (half closed)
4. eyelids completely shut

Convulsions or Tremors: (choose one)

1. absent
2. present
 - a. Clonic (contractions followed by relaxations)
 - b. Tonic (constant contraction and extension of hindlimb muscles)

Biting: (choose one)

1. none
2. biting of cage
3. self-destructive

Vocalizations: (choose one)

1. absent
2. present

MEASUREMENTS MADE WHILE HANDLING ANIMAL

Ease of Removal from Cage: (choose one)

1. easy; little or no vocalization, without resistance or only slight resistance to being picked up
2. moderately difficult; rat rears, often following technician's hand
3. difficult; runs around cage, is hard to grab, with or without vocalization

Ease of Handling Rat in Hand: (choose one)

1. easy; alert, limbs may be pulled against body
2. moderately easy; vocalization, without resistance to being handled
3. difficult; squirming, twisting, attempting to bite, with or without vocalization

Lacrimation: (choose one)

1. none
2. slight
3. severe

Salivation: (choose one)

1. none
2. slight
3. severe
4. rough

Fur Appearance: (choose one)

1. normal
2. slightly soiled
3. very soiled, crusty

OPEN FIELD ACTIVITY IN A NOVEL ENVIRONMENT (2 minutes)

Sniffing Movement (# of times): _____

Freezing (# of episodes)(secs/episode): _____

Grooming Episodes (# of times): _____

Total # of Fecal Boluses: _____

Diarrhea: (choose one)

1. absent
2. present (describe)

Total # of Urine Spots: _____

FUNCTIONAL OBSERVATION BATTERY

D E A T H

Study No. _____ Animal No. _____ Date _____

REFLEXES

Acoustic Response: (choose one)

1. no reaction
2. slight reaction, ear flick or some evidence that snap was heard
3. more energetic response than (2), may include vocalization

4. freezes, actual muscle contractions
5. bizarre reactions; jumps, bites, attacks

Approach Response: (choose one) (Approach rat's head on with a blunt object held approximately 3 cm from its face for a 4 second period.)

1. no reaction
2. slow approach, sniffing, or turning away
3. more energetic response than (2), may include vocalization

4. freezes, actual muscle contraction
5. bizarre reaction; jumps, bites, or attacks

Touch Response: (choose one) (Touch rat's rump with a blunt object.)

1. no reaction
2. rat may slowly turn, walk away
3. more energetic response than (2), may include vocalization

4. freezes, actual muscle contraction
5. bizarre reaction; jumps, bites, or attacks

Tail Pinch: (choose one) (Metal tweezers are used to squeeze the tail approximately 3 cm from the tip of the tail.)

1. no reaction
2. rat may turn, walk away
3. more energetic response than (2), may include vocalization

4. freezes, actual muscle contraction
5. bizarre reaction; jumps, bites, or attacks

Righting Reflex: (choose one) (Hold rat in supine position, drop approximately 30 cm, and score ease of landing.)

1. normal
2. slightly uncoordinated
3. rolls on side
4. rolls on back

PHYSIOLOGICAL MEASURES

Body Weight (grams): _____

Rectal Body Temperature (10sec): _____

OVERALL COMMENTS

Read and Reviewed By: _____

Date: _____

DEALT

UIC/TRL Study No. 200

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

F₁ Generation: Functional Observational Battery

Summary of Measures and Associated Neural Domains

CNS: EXCITABILITY	CNS: SENSORIMOTOR	AUTONOMIC	VESTIBULAR	PHYSICAL MEASURES
Posture (D) Palpebral Closure (R) Convulsions (D) Biting (D) Vocalization (Q) Ease of Removal From Cage (R) Ease of Handling (R) Sniffing (C) Freezing (C) Grooming (C)	Acoustic Response (R) Approach Response (R) Touch Response (R) Tail Pinch (R)	Lacrimation (R) Salivation (R) Fur Appearance (D) No. Fecals (C) No. Urines (C) Diarrhea (D)	Air Righting Reflex (R)	Body Weight (I) Body Temperature (I)

KEY:

D = Descriptive
R = Rank
Q = Quantal
C = Count
I = Interval

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UIC/TRL Study No. 200

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATSF₁ Generation: Functional Observational Battery

Dictionary of Terms

Abbreviation	Description
SNIFFINGS #	Total # of Sniffing Movement
FREEZE Seconds	Total Freezing Time
GROOMING #	Total # of Grooming Episodes
FECALS #	Total # of Fecal Boluses
URINE #	Total # of Urine Spots
BT C	Rectal Body Temperature
BW g	FOB Body Weight
POST	Posture
PALP CLOS	Palpebral Closure
CON/TREMOR	Convulsions or Tremors
BIT	Biting
VOC	Vocalization
EASEREM	Ease of Removal from Cage
EASEHAND	Ease of Handling Rat in Hand
LAC	Lacrimation
SAL	Salivation
FUR	Fur Appearance
DIA	Diarrhea
ACOURES	Acoustic Response
APPRES	Approach Response
TOUCHRES	Touch Response
TPINCH	Tail Pinch
AIRRIGHT	Air Righting Reflex

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 1-M:0 mg base/kg/day								
1011	8	0	0	5	2	37.8	99.0	3
1012	--	--	--	--	--	--	--	--
1013	5	0	1	0	1	37.3	101.0	3
1021	6	0	0	0	0	36.5	95.0	2
1023	--	--	--	--	--	--	--	--
1024	10	0	0	1	0	36.9	90.0	2
1025	--	--	--	--	--	--	--	--
1031	--	--	--	--	--	--	--	--
1032	7	0	1	1	0	35.9	90.0	2
1034	--	--	--	--	--	--	--	--
1036	8	0	1	0	0	37.3	94.0	2
1043	12	0	0	2	3	36.3	89.0	1
1045	--	--	--	--	--	--	--	--
1046	--	--	--	--	--	--	--	--
1047	9	0	2	0	2	36.7	87.0	1
1052	6	0	3	2	0	38.0	108.0	2
1053	--	--	--	--	--	--	--	--
1054	6	0	0	0	0	37.0	99.0	2
1056	--	--	--	--	--	--	--	--
1063	--	--	--	--	--	--	--	--
1064	--	--	--	--	--	--	--	--
1065	9	0	0	4	0	34.5	89.0	2
1066	6	0	0	0	0	35.3	95.0	2
1071	9	0	1	4	0	34.8	82.0	3
1072	11	0	1	0	0	33.5	91.0	3
1073	--	--	--	--	--	--	--	--
1081	--	--	--	--	--	--	--	--
1082	--	--	--	--	--	--	--	--
1083	7	0	0	3	0	36.3	113.0	4
1084	8	0	2	0	0	34.7	111.0	4
1091	12	0	1	0	0	35.2	95.0	2
1092	--	--	--	--	--	--	--	--
1095	--	--	--	--	--	--	--	--
1097	11	0	2	0	0	36.2	87.0	2
1101	--	--	--	--	--	--	--	--
1102	13	0	1	1	6	37.3	--	1
1104	12	0	0	3	6	37.5	116.0	1
1105	--	--	--	--	--	--	--	--
1111	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEAST

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 1-M:0 mg base/kg/day								
1112	19	0	2	0	0	35.1	92.0	4
1113	20	0	2	1	0	36.9	103.0	1
1123	--	--	--	--	--	--	--	--
1125	5	0	2	0	0	36.6	86.0	1
1127	10	0	1	1	0	37.2	82.0	1
1128	--	--	--	--	--	--	--	--
1131	--	--	--	--	--	--	--	--
1134	--	--	--	--	--	--	--	--
1135	19	0	0	0	7	35.1	100.0	3
1136	16	0	2	1	1	34.1	107.0	3
1142	--	--	--	--	--	--	--	--
1146	8	0	2	0	0	35.6	75.0	4
1148	8	0	1	0	0	34.2	88.0	3
1149	--	--	--	--	--	--	--	--
1151	--	--	--	--	--	--	--	--
1152	6	0	0	3	0	35.2	86.0	3
1153	11	33	0	2	0	34.7	88.0	3
1155	--	--	--	--	--	--	--	--
1161	7	0	2	4	18	35.2	89.0	2
1162	10	0	2	4	0	36.0	96.0	2
1163	--	--	--	--	--	--	--	--
1164	--	--	--	--	--	--	--	--
1171	--	--	--	--	--	--	--	--
1173	5	0	4	0	5	35.7	96.0	2
1174	5	0	2	0	0	33.9	96.0	2
1175	--	--	--	--	--	--	--	--
1182	--	--	--	--	--	--	--	--
1185	3	16	3	1	0	35.7	106.0	1
1188	--	--	--	--	--	--	--	--
1189	11	0	1	0	2	35.7	106.0	1
1191	--	--	--	--	--	--	--	--
1192	10	0	1	1	1	36.6	101.0	3
1193	9	0	2	2	0	36.2	98.0	3
1195	--	--	--	--	--	--	--	--
1202	11	0	0	1	0	33.5	95.0	4
1203	13	0	1	3	0	34.4	84.0	4
1204	--	--	--	--	--	--	--	--
1205	--	--	--	--	--	--	--	--
1212	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 1-M:0 mg base/kg/day								
1214	12	0	0	0	0	37.0	91.0	3
1215	10	0	0	1	4	36.5	93.0	3
1216	--	--	--	--	--	--	--	--
1222	--	--	--	--	--	--	--	--
1223	14	0	1	7	2	34.9	87.0	2
1225	--	--	--	--	--	--	--	--
1226	8	0	1	3	0	35.8	81.0	2
1231	--	--	--	--	--	--	--	--
1233	6	0	1	0	0	35.3	84.0	2
1236	12	0	0	1	0	34.8	86.0	2
1237	--	--	--	--	--	--	--	--
1242	13	0	2	2	0	34.8	80.0	4
1243	--	--	--	--	--	--	--	--
1245	--	--	--	--	--	--	--	--
1248	10	0	0	0	0	34.9	86.0	4
1251	9	0	0	0	0	36.2	93.0	2
12515	5	0	2	0	0	35.9	95.0	2
MEAN	10	1	1	1	1	35.8	93.5	2
SD	3.7	5.1	1.0	1.6	3.0	1.13	9.00	1.0
N	50	50	50	50	50	50	49	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

000000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 2-M:2 mg base/kg/day								
1263	--	--	--	--	--	--	--	--
1264	10	0	0	5	5	37.1	105.0	4
1266	--	--	--	--	--	--	--	--
1267	10	0	3	0	0	36.8	102.0	4
1271	--	--	--	--	--	--	--	--
1275	9	0	0	0	0	35.0	84.0	2
1277	7	0	0	0	0	35.2	85.0	2
1278	--	--	--	--	--	--	--	--
1282	--	--	--	--	--	--	--	--
1283	9	0	0	2	1	38.2	80.0	2
1284	--	--	--	--	--	--	--	--
1286	7	0	2	0	0	38.4	86.0	2
1292	--	--	--	--	--	--	--	--
1294	--	--	--	--	--	--	--	--
1295	3	0	2	0	0	36.9	98.0	2
1296	7	0	2	0	0	37.0	95.0	2
1301	--	--	--	--	--	--	--	--
1302	--	--	--	--	--	--	--	--
1307	7	0	1	4	1	37.6	92.0	4
1309	7	0	2	0	6	38.4	94.0	4
1311	9	0	0	1	0	37.6	108.0	4
1312	8	0	0	3	0	37.4	109.0	4
1313	--	--	--	--	--	--	--	--
1322	9	0	0	0	0	37.1	101.0	3
1323	10	0	0	0	0	36.9	107.0	3
1324	--	--	--	--	--	--	--	--
1325	--	--	--	--	--	--	--	--
1331	13	0	0	0	0	37.0	95.0	2
1332	--	--	--	--	--	--	--	--
1333	5	0	1	2	0	36.3	94.0	2
1341	8	0	0	0	0	36.9	88.0	4
1342	--	--	--	--	--	--	--	--
1343	9	0	0	1	0	36.2	93.0	4
1351	--	--	--	--	--	--	--	--
1352	--	--	--	--	--	--	--	--
1353	12	0	1	4	23	35.8	96.0	4
1354	19	0	0	0	12	36.4	88.0	3
1361	16	0	0	0	1	36.2	90.0	3
1362	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 2-M:2 mg base/kg/day								
1363	--	--	--	--	--	--	--	--
1365	14	0	1	2	8	36.0	96.0	4
1375	10	0	1	0	0	36.6	96.0	2
1376	--	--	--	--	--	--	--	--
1378	--	--	--	--	--	--	--	--
1379	9	0	0	0	0	36.3	104.0	2
1382	15	0	0	3	0	33.7	101.0	4
1383	19	0	0	0	2	35.1	101.0	4
1386	--	--	--	--	--	--	--	--
1387	--	--	--	--	--	--	--	--
1391	--	--	--	--	--	--	--	--
1392	8	0	1	0	0	35.7	94.0	2
1393	--	--	--	--	--	--	--	--
1394	7	0	1	3	0	35.5	96.0	2
1401	8	0	2	2	12	34.3	81.0	3
1402	--	--	--	--	--	--	--	--
1404	6	0	1	1	1	33.0	80.0	1
1406	--	--	--	--	--	--	--	--
1414	8	0	0	0	0	34.9	91.0	4
1415	11	0	0	3	0	35.3	94.0	3
1417	--	--	--	--	--	--	--	--
1419	--	--	--	--	--	--	--	--
1421	4	0	2	0	2	37.0	84.0	4
1426	--	--	--	--	--	--	--	--
1427	--	--	--	--	--	--	--	--
1428	12	0	1	0	0	35.9	92.0	4
1431	--	--	--	--	--	--	--	--
1432	13	0	0	0	0	34.3	97.0	4
1433	--	--	--	--	--	--	--	--
1434	11	0	1	2	0	35.7	89.0	3
1441	--	--	--	--	--	--	--	--
1442	--	--	--	--	--	--	--	--
1443	5	0	3	1	0	35.3	90.0	2
1444	11	0	3	0	0	35.9	91.0	2
1451	--	--	--	--	--	--	--	--
1452	8	10	1	0	0	35.3	77.0	3
1453	--	--	--	--	--	--	--	--
1454	16	0	0	3	0	35.7	71.0	3
1461	15	0	0	1	2	35.1	100.0	4

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 2-M:2 mg base/kg/day								
1463	14	0	0	2	0	35.8	96.0	4
1464	--	--	--	--	--	--	--	--
1465	--	--	--	--	--	--	--	--
1472	--	--	--	--	--	--	--	--
1473	--	--	--	--	--	--	--	--
1474	4	27	0	3	2	35.5	89.0	1
1475	8	0	1	0	0	35.8	85.0	1
1481	--	--	--	--	--	--	--	--
1483	9	0	1	0	0	36.4	92.0	1
1484	10	0	0	1	0	36.3	86.0	1
1485	--	--	--	--	--	--	--	--
1491	11	0	2	2	0	34.9	79.0	2
1492	--	--	--	--	--	--	--	--
1493	6	0	1	0	0	34.2	97.0	2
1501	15	0	1	4	0	35.7	87.0	1
1502	14	0	1	3	0	34.7	91.0	2
1503	--	--	--	--	--	--	--	--
1504	--	--	--	--	--	--	--	--
MEAN	10	1	1	1	2	36.0	92.3	3
SD	3.7	4.0	0.9	1.4	4.1	1.16	8.22	1.1
N	50	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DATA

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 3-M:6 mg base/kg/day								
1511	8	0	0	0	19	36.9	95.0	2
1513	--	--	--	--	--	--	--	--
1514	--	--	--	--	--	--	--	--
1515	11	0	0	4	6	37.4	97.0	2
1521	--	--	--	--	--	--	--	--
1523	9	0	2	1	10	34.0	97.0	1
1524	7	0	0	0	1	34.6	93.0	2
1528	--	--	--	--	--	--	--	--
1531	--	--	--	--	--	--	--	--
1532	13	0	2	0	2	34.3	88.0	4
1533	12	0	1	0	1	36.4	83.0	3
1534	--	--	--	--	--	--	--	--
1541	--	--	--	--	--	--	--	--
1542	8	0	2	0	0	37.1	92.0	3
1544	2	0	1	0	0	35.9	89.0	2
1545	--	--	--	--	--	--	--	--
1552	--	--	--	--	--	--	--	--
1554	11	17	2	1	1	35.7	99.0	2
1555	14	0	1	0	0	35.5	89.0	2
1556	--	--	--	--	--	--	--	--
1561	7	0	2	0	0	37.4	88.0	2
1564	--	--	--	--	--	--	--	--
1566	14	0	1	0	0	37.5	93.0	2
1567	--	--	--	--	--	--	--	--
1571	11	0	1	2	4	36.6	114.0	2
1572	--	--	--	--	--	--	--	--
1574	21	0	0	2	1	37.5	107.0	2
1576	--	--	--	--	--	--	--	--
1581	--	--	--	--	--	--	--	--
1583	--	--	--	--	--	--	--	--
1584	13	0	2	1	0	34.8	84.0	2
1585	12	0	1	1	0	34.5	82.0	2
1603	5	0	0	0	0	35.2	90.0	4
1604	--	--	--	--	--	--	--	--
1605	12	0	0	0	0	36.9	100.0	4
1607	--	--	--	--	--	--	--	--
1611	14	0	2	3	1	35.8	83.0	2
1612	8	0	1	3	12	34.9	73.0	2
1613	--	--	--	--	--	--	--	--

(--) - Data Unavailable

Note: There were no animals for F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

DECAT

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 3-M:6 mg base/kg/day								
1614	--	--	--	--	--	--	--	--
1622	7	0	1	0	0	35.6	95.0	1
1623	--	--	--	--	--	--	--	--
1624	--	--	--	--	--	--	--	--
1625	3	0	1	0	0	36.9	104.0	1
1631	--	--	--	--	--	--	--	--
1634	10	0	1	1	4	35.7	89.0	1
1635	--	--	--	--	--	--	--	--
1636	1	7D	1	1	0	31.8	81.0	2
1642	--	--	--	--	--	--	--	--
1644	8	0	1	2	0	37.4	84.0	2
1646	6	0	1	0	2	34.2	78.0	2
1647	--	--	--	--	--	--	--	--
1652	8	0	0	0	0	34.8	92.0	4
1654	--	--	--	--	--	--	--	--
1655	--	--	--	--	--	--	--	--
1658	4	0	1	2	4	36.2	92.0	4
1661	21	0	0	0	0	34.5	86.0	2
1662	--	--	--	--	--	--	--	--
1664	14	0	1	0	0	35.2	86.0	2
1665	--	--	--	--	--	--	--	--
1671	--	--	--	--	--	--	--	--
1672	8	0	0	4	1	35.8	83.0	2
1673	6	0	0	1	0	35.9	90.0	3
1674	--	--	--	--	--	--	--	--
1681	3	0	1	0	0	36.5	91.0	2
1685	6	0	0	3	0	36.4	87.0	2
1687	--	--	--	--	--	--	--	--
1689	--	--	--	--	--	--	--	--
1691	5	21	0	0	4	34.9	86.0	3
1692	4	0	2	0	0	35.0	90.0	3
1693	--	--	--	--	--	--	--	--
1695	--	--	--	--	--	--	--	--
1704	8	0	1	1	0	35.2	89.0	1
1705	--	--	--	--	--	--	--	--
1706	15	0	2	0	0	35.9	88.0	1
1707	--	--	--	--	--	--	--	--
1712	--	--	--	--	--	--	--	--
1714	8	0	1	0	0	33.6	90.0	2

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEAD

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 3-M:6 mg base/kg/day								
1715	5	0	1	5	4	35.3	95.0	2
1716	--	--	--	--	--	--	--	--
1723	14	0	0	1	5	33.6	74.0	1
1726	--	--	--	--	--	--	--	--
1727	12	0	1	0	0	35.8	79.0	1
1728	--	--	--	--	--	--	--	--
1733	9	0	0	1	0	36.9	103.0	3
1734	17	0	0	0	1	35.5	103.0	3
1735	--	--	--	--	--	--	--	--
1737	--	--	--	--	--	--	--	--
1741	8	0	0	0	1	35.9	102.0	3
1742	--	--	--	--	--	--	--	--
1743	6	0	2	0	11	37.0	103.0	3
1746	--	--	--	--	--	--	--	--
1751	--	--	--	--	--	--	--	--
1752	--	--	--	--	--	--	--	--
1754	15	0	0	0	0	34.3	81.0	2
1755	17	0	0	0	0	34.7	78.0	2
MEAN	10	2	1	1	2	35.6	90.3	2
SD	4.7	10.7	0.8	1.3	3.8	1.22	8.71	0.9
N	48	48	48	48	48	48	48	48

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

000007

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 4-M:18 mg base/kg/day								
1761	--	--	--	--	--	--	--	--
1762	4	0	1	0	0	36.9	80.0	1
1763	13	0	1	0	10	37.4	81.0	1
1764	--	--	--	--	--	--	--	--
1771	--	--	--	--	--	--	--	--
1772	--	--	--	--	--	--	--	--
1773	11	0	0	4	0	37.4	93.0	4
1774	8	0	0	0	3	37.9	91.0	4
1781	--	--	--	--	--	--	--	--
1782	12	0	2	0	0	36.5	76.0	2
1783	9	0	1	0	0	35.7	73.0	2
1791	--	--	--	--	--	--	--	--
1792	10	0	4	2	7	35.7	88.0	4
1793	--	--	--	--	--	--	--	--
1795	11	0	4	2	0	34.5	89.0	4
1801	6	0	2	0	0	37.0	76.0	2
1804	--	--	--	--	--	--	--	--
1806	7	0	3	4	0	37.1	77.0	2
1807	--	--	--	--	--	--	--	--
1811	--	--	--	--	--	--	--	--
1812	--	--	--	--	--	--	--	--
1813	13	0	0	3	0	36.8	88.0	1
1814	9	0	0	0	5	37.5	85.0	1
1821	--	--	--	--	--	--	--	--
1822	--	--	--	--	--	--	--	--
1823	11	0	2	3	1	35.9	89.0	4
1824	11	0	0	3	0	37.2	89.0	4
1831	12	0	0	0	0	35.0	104.0	2
1833	--	--	--	--	--	--	--	--
1835	5	0	0	0	0	34.3	102.0	2
1836	--	--	--	--	--	--	--	--
1843	--	--	--	--	--	--	--	--
1844	--	--	--	--	--	--	--	--
1845	5	0	1	2	0	37.2	88.0	2
1846	7	0	2	0	0	37.6	86.0	2
1851	--	--	--	--	--	--	--	--
1852	14	0	0	2	0	36.3	96.0	4
1853	18	0	0	1	1	36.7	105.0	2
1855	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 4-M:18 mg base/kg/day								
1861	16	0	2	2	0	36.0	81.0	3
1863	--	--	--	--	--	--	--	--
1864	--	--	--	--	--	--	--	--
1865	10	36	0	1	5	36.1	75.0	3
1872	--	--	--	--	--	--	82.0	--
1873	11	0	0	3	0	36.6	--	2
1875	11	0	2	2	0	36.3	78.0	2
1876	--	--	--	--	--	--	--	--
1882	10	0	1	3	1	36.2	101.0	4
1883	12	0	1	0	0	36.4	96.0	4
1887	--	--	--	--	--	--	--	--
1888	--	--	--	--	--	--	--	--
1892	--	--	--	--	--	--	--	--
1894	7	0	2	3	18	37.4	77.0	2
1897	10	0	2	4	0	37.6	73.0	2
1898	--	--	--	--	--	--	--	--
1901	7	20	2	3	0	35.9	76.0	2
1902	--	--	--	--	--	--	--	--
1904	10	0	2	3	0	35.7	75.0	2
1912	10	0	0	0	1	33.9	89.0	3
1914	10	0	2	0	0	32.5	86.0	3
1916	--	--	--	--	--	--	--	--
1917	--	--	--	--	--	--	--	--
1921	9	0	0	4	2	33.6	76.0	3
1922	--	--	--	--	--	--	--	--
1924	7	0	0	0	0	33.8	70.0	3
1925	--	--	--	--	--	--	--	--
1931	--	--	--	--	--	--	--	--
1933	--	--	--	--	--	--	--	--
1934	11	0	2	3	0	34.4	73.0	2
1936	8	0	3	3	0	37.8	73.0	2
1941	12	0	0	4	0	34.7	84.0	2
1942	15	0	0	2	0	32.3	95.0	2
1943	--	--	--	--	--	--	--	--
1944	--	--	--	--	--	--	--	--
1951	--	--	--	--	--	--	--	--
1952	10	0	1	1	0	35.7	78.0	3
1953	--	--	--	--	--	--	--	--
1956	8	0	0	0	1	35.6	85.0	4

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200							SEX: MALE	
STUDY NO: 200								
Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 4-M:18 mg base/kg/day								
1962	4	0	3	0	3	35.0	90.0	1
1964	--	--	--	--	--	--	--	--
1965	12	0	0	0	2	36.0	83.0	1
1966	--	--	--	--	--	--	--	--
1971	--	--	--	--	--	--	--	--
1972	12	0	0	2	0	34.9	80.0	1
1973	--	--	--	--	--	--	--	--
1974	12	0	0	0	0	35.1	70.0	1
1981	--	--	--	--	--	--	--	--
1982	7	0	0	2	0	36.2	82.0	1
1985	--	--	--	--	--	--	--	--
1988	12	0	0	5	0	36.4	85.0	1
1991	15	0	1	2	0	34.4	62.0	1
1992	--	--	--	--	--	--	--	--
1993	11	0	0	0	0	34.2	71.0	3
1995	--	--	--	--	--	--	--	--
2002	--	--	--	--	--	--	--	--
2004	--	--	--	--	--	--	--	--
2005	10	0	0	0	2	36.1	89.0	3
2008	6	0	2	2	11	36.6	86.0	3
MEAN	10	1	1	2	1	35.9	83.5	2
SD	3.0	5.8	1.2	1.5	3.4	1.35	9.46	1.0
N	50	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 1-M:0 mg base/kg/day								
1011	1	1	1	1	1	1	1	1
1012	--	--	--	--	--	--	--	--
1013	1	1	1	1	1	1	1	1
1021	1	1	1	1	1	1	1	1
1023	--	--	--	--	--	--	--	--
1024	1	1	1	1	1	1	1	1
1025	--	--	--	--	--	--	--	--
1031	--	--	--	--	--	--	--	--
1032	1	1	1	1	1	1	1	1
1034	--	--	--	--	--	--	--	--
1036	1	1	1	1	1	1	1	1
1043	4	1	1	1	1	1	1	1
1045	--	--	--	--	--	--	--	--
1046	--	--	--	--	--	--	--	--
1047	4	1	1	1	1	1	1	1
1052	1	1	1	1	1	1	1	1
1053	--	--	--	--	--	--	--	--
1054	1	1	1	1	1	1	1	1
1056	--	--	--	--	--	--	--	--
1063	--	--	--	--	--	--	--	--
1064	--	--	--	--	--	--	--	--
1065	1	1	1	1	1	1	1	1
1066	1	1	1	1	1	1	1	1
1071	1	1	1	1	1	1	1	1
1072	1	1	1	1	1	2	1	1
1073	--	--	--	--	--	--	--	--
1081	--	--	--	--	--	--	--	--
1082	--	--	--	--	--	--	--	--
1083	1	1	1	1	1	1	1	1
1084	1	1	1	1	1	1	1	1
1091	2	1	1	1	1	1	1	1
1092	--	--	--	--	--	--	--	--
1095	--	--	--	--	--	--	--	--
1097	2	1	1	1	1	1	1	1
1101	--	--	--	--	--	--	--	--
1102	4	1	1	1	1	1	1	1
1104	4	1	1	1	1	1	1	1
1105	--	--	--	--	--	--	--	--
1111	--	--	--	--	--	--	--	--

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
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GROUP: 1-M:0 mg base/kg/day

1112	1	1	1	1	1	1	1	1
1113	4	1	1	1	1	1	1	1
1123	--	--	--	--	--	--	--	--
1125	4	1	1	1	1	1	1	1
1127	4	1	1	1	1	1	1	1
1128	--	--	--	--	--	--	--	--
1131	--	--	--	--	--	--	--	--
1134	--	--	--	--	--	--	--	--
1135	1	1	1	1	1	1	1	1
1136	1	1	1	1	1	1	1	1
1142	--	--	--	--	--	--	--	--
1146	1	1	1	1	1	1	1	1
1148	1	1	1	1	1	1	1	1
1149	--	--	--	--	--	--	--	--
1151	--	--	--	--	--	--	--	--
1152	1	1	1	1	1	1	1	1
1153	1	1	1	1	1	1	1	1
1155	--	--	--	--	--	--	--	--
1161	1	1	1	1	1	1	1	1
1162	1	1	1	1	1	1	1	1
1163	--	--	--	--	--	--	--	--
1164	--	--	--	--	--	--	--	--
1171	--	--	--	--	--	--	--	--
1173	1	1	1	1	1	1	1	1
1174	1	1	1	1	1	1	1	1
1175	--	--	--	--	--	--	--	--
1182	--	--	--	--	--	--	--	--
1185	4	1	1	1	1	1	1	1
1188	--	--	--	--	--	--	--	--
1189	4	1	1	1	1	1	1	1
1191	--	--	--	--	--	--	--	--
1192	1	1	1	1	1	1	1	1
1193	1	1	1	1	1	1	1	1
1195	--	--	--	--	--	--	--	--
1202	1	1	1	1	1	1	1	1
1203	1	1	1	1	1	1	1	1
1204	--	--	--	--	--	--	--	--
1205	--	--	--	--	--	--	--	--
1212	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP	CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 1-M:0 mg base/kg/day									
1214	1		1	1	1	1	1	1	1
1215	1		1	1	1	1	1	1	1
1216	--		--	--	--	--	--	--	--
1222	--		--	--	--	--	--	--	--
1223	1		1	1	1	1	1	1	1
1225	--		--	--	--	--	--	--	--
1226	1		1	1	1	1	1	1	1
1231	--		--	--	--	--	--	--	--
1233	1		1	1	1	1	1	1	1
1236	1		1	1	1	1	1	1	1
1237	--		--	--	--	--	--	--	--
1242	1		1	1	1	1	1	1	1
1243	--		--	--	--	--	--	--	--
1245	--		--	--	--	--	--	--	--
1248	1		1	1	1	1	1	1	1
1251	2		1	1	1	1	1	1	1
12515	4		1	1	1	1	1	1	1
MEAN	2		1	1	1	1	1	1	1
SD	1.2		0.0	0.0	0.0	0.0	0.1	0.0	0.0
N	50		50	50	50	50	50	50	50

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
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GROUP: 2-M:2 mg base/kg/day

1263	--	--	--	--	--	--	--	--
1264	1	1	1	1	1	1	1	1
1266	--	--	--	--	--	--	--	--
1267	1	1	1	1	1	1	1	1
1271	--	--	--	--	--	--	--	--
1275	1	1	1	1	1	1	1	1
1277	1	1	1	1	1	1	1	1
1278	--	--	--	--	--	--	--	--
1282	--	--	--	--	--	--	--	--
1283	1	1	1	1	1	1	1	1
1284	--	--	--	--	--	--	--	--
1286	1	1	1	1	1	1	1	1
1292	--	--	--	--	--	--	--	--
1294	--	--	--	--	--	--	--	--
1295	1	1	1	1	1	1	1	1
1296	1	1	1	1	1	1	1	1
1301	--	--	--	--	--	--	--	--
1302	--	--	--	--	--	--	--	--
1307	1	1	1	1	1	1	1	1
1309	1	1	1	1	1	1	1	1
1311	1	1	1	1	1	1	1	1
1312	1	1	1	1	1	1	1	1
1313	--	--	--	--	--	--	--	--
1322	1	1	1	1	1	1	1	1
1323	1	1	1	1	1	1	1	1
1324	--	--	--	--	--	--	--	--
1325	--	--	--	--	--	--	--	--
1331	2	1	1	1	1	1	1	1
1332	--	--	--	--	--	--	--	--
1333	1	1	1	1	1	1	1	1
1341	1	1	1	1	1	1	1	1
1342	--	--	--	--	--	--	--	--
1343	1	1	1	1	1	1	1	1
1351	--	--	--	--	--	--	--	--
1352	--	--	--	--	--	--	--	--
1353	1	1	1	1	1	1	1	1
1354	1	1	1	1	1	2	1	1
1361	1	1	1	1	1	1	1	1
1362	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 2-M:2 mg base/kg/day								
1363	--	--	--	--	--	--	--	--
1365	1	1	1	1	1	1	1	1
1375	1	1	1	1	1	1	1	1
1376	--	--	--	--	--	--	--	--
1378	--	--	--	--	--	--	--	--
1379	1	1	1	1	1	1	1	1
1382	1	1	1	1	1	1	1	1
1383	1	1	1	1	1	1	1	1
1386	--	--	--	--	--	--	--	--
1387	--	--	--	--	--	--	--	--
1391	--	--	--	--	--	--	--	--
1392	2	1	1	1	1	1	1	1
1393	--	--	--	--	--	--	--	--
1394	2	1	1	1	1	1	1	1
1401	1	1	1	1	1	1	1	1
1402	--	--	--	--	--	--	--	--
1404	1	1	1	1	1	1	1	1
1406	--	--	--	--	--	--	--	--
1414	1	1	1	1	1	1	1	1
1415	1	1	1	1	1	1	1	1
1417	--	--	--	--	--	--	--	--
1419	--	--	--	--	--	--	--	--
1421	1	1	1	1	1	1	1	1
1426	--	--	--	--	--	--	--	--
1427	--	--	--	--	--	--	--	--
1428	1	1	1	1	1	1	1	1
1431	--	--	--	--	--	--	--	--
1432	1	1	1	1	1	1	1	1
1433	--	--	--	--	--	--	--	--
1434	1	1	1	1	1	1	1	1
1441	--	--	--	--	--	--	--	--
1442	--	--	--	--	--	--	--	--
1443	1	1	1	1	1	1	1	1
1444	1	1	1	1	1	1	1	1
1451	--	--	--	--	--	--	--	--
1452	1	1	1	1	1	1	1	1
1453	--	--	--	--	--	--	--	--
1454	1	1	1	1	1	1	1	1
1461	1	1	1	1	1	1	1	1

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 2-M:2 mg base/kg/day								
1463	1	1	1	1	1	1	1	1
1464	--	--	--	--	--	--	--	--
1465	--	--	--	--	--	--	--	--
1472	--	--	--	--	--	--	--	--
1473	--	--	--	--	--	--	--	--
1474	4	1	1	1	1	1	1	1
1475	4	1	1	1	1	1	1	1
1481	--	--	--	--	--	--	--	--
1483	4	1	1	1	1	1	1	1
1484	4	1	1	1	1	1	1	1
1485	--	--	--	--	--	--	--	--
1491	2	1	1	1	1	1	1	1
1492	--	--	--	--	--	--	--	--
1493	2	1	1	1	1	1	1	1
1501	1	1	1	1	1	1	1	1
1502	1	1	1	1	1	1	1	1
1503	--	--	--	--	--	--	--	--
1504	--	--	--	--	--	--	--	--
MEAN	1	1	1	1	1	1	1	1
SD	0.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0
N	50	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200									SEX: MALE
STUDY NO: 200									
Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL	
GROUP: 3-M:6 mg base/kg/day									
1511	1	1	1	1	1	1	1	1	
1513	--	--	--	--	--	--	--	--	
1514	--	--	--	--	--	--	--	--	
1515	1	1	1	1	1	1	1	1	
1521	--	--	--	--	--	--	--	--	
1523	4	1	1	1	1	1	1	1	
1524	1	1	1	1	1	1	1	1	
1528	--	--	--	--	--	--	--	--	
1531	--	--	--	--	--	--	--	--	
1532	1	1	1	1	1	1	1	1	
1533	1	1	1	1	1	1	1	1	
1534	--	--	--	--	--	--	--	--	
1541	--	--	--	--	--	--	--	--	
1542	1	1	1	1	1	1	1	1	
1544	1	1	1	1	1	1	1	1	
1545	--	--	--	--	--	--	--	--	
1552	--	--	--	--	--	--	--	--	
1554	2	1	1	1	1	1	1	1	
1555	2	1	1	1	1	1	1	1	
1556	--	--	--	--	--	--	--	--	
1561	1	1	1	1	1	1	1	1	
1564	--	--	--	--	--	--	--	--	
1566	1	1	1	1	1	1	1	1	
1567	--	--	--	--	--	--	--	--	
1571	1	1	1	1	1	1	1	1	
1572	--	--	--	--	--	--	--	--	
1574	1	1	1	1	1	1	1	1	
1576	--	--	--	--	--	--	--	--	
1581	--	--	--	--	--	--	--	--	
1583	--	--	--	--	--	--	--	--	
1584	1	1	1	1	1	1	1	1	
1585	1	1	1	1	1	1	1	1	
1603	1	1	1	1	1	1	1	1	
1604	--	--	--	--	--	--	--	--	
1605	1	1	1	1	1	1	1	1	
1607	--	--	--	--	--	--	--	--	
1611	1	1	1	1	1	1	1	1	
1612	1	1	1	1	1	1	1	1	
1613	--	--	--	--	--	--	--	--	

(--) - Data Unavailable

Note: There were no animals for F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
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GROUP: 3-M:6 mg base/kg/day

1614	--	--	--	--	--	--	--	--
1622	4	1	1	1	1	1	1	1
1623	--	--	--	--	--	--	--	--
1624	--	--	--	--	--	--	--	--
1625	4	1	1	1	1	1	1	1
1631	--	--	--	--	--	--	--	--
1634	4	1	1	1	1	1	1	1
1635	--	--	--	--	--	--	--	--
1636	2	1	1	1	1	1	1	1
1642	--	--	--	--	--	--	--	--
1644	1	1	1	1	1	1	1	1
1646	1	1	1	1	1	1	1	1
1647	--	--	--	--	--	--	--	--
1652	1	1	1	1	1	1	1	1
1654	--	--	--	--	--	--	--	--
1655	--	--	--	--	--	--	--	--
1658	1	1	1	1	1	1	1	1
1661	1	1	1	1	1	1	1	1
1662	--	--	--	--	--	--	--	--
1664	1	1	1	1	1	1	1	1
1665	--	--	--	--	--	--	--	--
1671	--	--	--	--	--	--	--	--
1672	2	1	1	1	1	1	1	1
1673	1	1	1	1	1	1	1	1
1674	--	--	--	--	--	--	--	--
1681	1	1	1	1	1	1	1	1
1685	1	1	1	1	1	1	1	1
1687	--	--	--	--	--	--	--	--
1689	--	--	--	--	--	--	--	--
1691	1	1	1	1	1	1	1	1
1692	1	1	1	1	1	1	1	1
1693	--	--	--	--	--	--	--	--
1695	--	--	--	--	--	--	--	--
1704	4	1	1	1	1	1	1	1
1705	--	--	--	--	--	--	--	--
1706	4	1	1	1	1	1	1	1
1707	--	--	--	--	--	--	--	--
1712	--	--	--	--	--	--	--	--
1714	1	1	1	1	1	1	1	1

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY IO: 200
STUDY NO: 200

SEX: MALE

Animal IO	PALP	CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 3-M:6 mg base/kg/day									
1715	1		1	1	1	1	1	1	1
1716	--		--	--	--	--	--	--	--
1723	4		1	1	1	1	1	1	1
1726	--		--	--	--	--	--	--	--
1727	4		1	1	1	1	1	1	1
1728	--		--	--	--	--	--	--	--
1733	1		1	1	1	1	1	1	1
1734	1		1	1	1	1	1	1	1
1735	--		--	--	--	--	--	--	--
1737	--		--	--	--	--	--	--	--
1741	1		1	1	1	1	1	1	1
1742	--		--	--	--	--	--	--	--
1743	1		1	1	1	1	1	1	1
1746	--		--	--	--	--	--	--	--
1751	--		--	--	--	--	--	--	--
1752	--		--	--	--	--	--	--	--
1754	3		1	1	1	1	1	1	1
1755	3		1	1	1	1	1	1	1
MEAN	2		1	1	1	1	1	1	1
SD	1.2		0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	48		48	48	48	48	48	48	48

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
-----------	-----------	------------	-----	-----	---------	----------	-----	-----

GROUP: 4-M:18 mg base/kg/day

1761	--	--	--	--	--	--	--	--
1762	4	1	1	1	1	1	1	1
1763	4	1	1	1	1	1	1	1
1764	--	--	--	--	--	--	--	--
1771	--	--	--	--	--	--	--	--
1772	--	--	--	--	--	--	--	--
1773	1	1	1	1	1	1	1	1
1774	1	1	1	1	1	1	1	1
1781	--	--	--	--	--	--	--	--
1782	2	1	1	1	1	1	1	1
1783	2	1	1	1	1	1	1	1
1791	--	--	--	--	--	--	--	--
1792	1	1	1	1	1	1	1	1
1793	--	--	--	--	--	--	--	--
1795	1	1	1	1	1	1	1	1
1801	1	1	1	1	1	1	1	1
1804	--	--	--	--	--	--	--	--
1806	1	1	1	1	1	1	1	1
1807	--	--	--	--	--	--	--	--
1811	--	--	--	--	--	--	--	--
1812	--	--	--	--	--	--	--	--
1813	4	1	1	1	1	1	1	1
1814	4	1	1	1	1	1	1	1
1821	--	--	--	--	--	--	--	--
1822	--	--	--	--	--	--	--	--
1823	1	1	1	1	1	1	1	1
1824	1	1	1	1	1	1	1	1
1831	1	1	1	1	1	1	1	1
1833	--	--	--	--	--	--	--	--
1835	1	1	1	1	1	1	1	1
1836	--	--	--	--	--	--	--	--
1843	--	--	--	--	--	--	--	--
1844	--	--	--	--	--	--	--	--
1845	1	1	1	1	1	1	1	1
1846	1	1	1	1	1	1	1	1
1851	--	--	--	--	--	--	--	--
1852	1	1	1	1	1	1	1	1
1853	1	1	1	1	1	1	1	1
1855	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 4-M:18 mg base/kg/day								
1861	1	1	1	1	1	1	1	1
1863	--	--	--	--	--	--	--	--
1864	--	--	--	--	--	--	--	--
1865	1	1	1	1	1	2	1	1
1872	--	--	--	--	--	--	--	--
1873	1	1	1	1	1	1	1	1
1875	1	1	1	1	1	1	1	1
1876	--	--	--	--	--	--	--	--
1882	1	1	1	1	1	1	1	1
1883	1	1	1	1	1	1	1	1
1887	--	--	--	--	--	--	--	--
1888	--	--	--	--	--	--	--	--
1892	--	--	--	--	--	--	--	--
1894	1	1	1	1	1	1	1	1
1897	1	1	1	1	1	1	1	1
1898	--	--	--	--	--	--	--	--
1901	1	1	1	1	1	1	1	1
1902	--	--	--	--	--	--	--	--
1904	1	1	1	1	1	1	1	1
1912	1	1	1	1	1	1	1	1
1914	1	1	1	1	1	1	1	1
1916	--	--	--	--	--	--	--	--
1917	--	--	--	--	--	--	--	--
1921	1	1	1	1	1	1	1	1
1922	--	--	--	--	--	--	--	--
1924	1	1	1	1	1	1	1	1
1925	--	--	--	--	--	--	--	--
1931	--	--	--	--	--	--	--	--
1933	--	--	--	--	--	--	--	--
1934	1	1	1	1	1	1	1	1
1936	1	1	1	1	1	1	1	1
1941	1	1	1	1	1	1	1	1
1942	1	1	1	1	1	1	1	1
1943	--	--	--	--	--	--	--	--
1944	--	--	--	--	--	--	--	--
1951	--	--	--	--	--	--	--	--
1952	1	1	1	1	1	1	1	1
1953	--	--	--	--	--	--	--	--
1956	1	1	1	1	1	1	1	1

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
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GROUP: 4-M:18 mg base/kg/day

1962	4	1	1	1	1	1	1	1
1964	--	--	--	--	--	--	--	--
1965	4	1	1	1	1	1	1	1
1966	--	--	--	--	--	--	--	--
1971	--	--	--	--	--	--	--	--
1972	4	1	1	1	1	1	1	1
1973	--	--	--	--	--	--	--	--
1974	4	1	1	1	1	1	1	1
1981	--	--	--	--	--	--	--	--
1982	4	1	1	1	1	1	1	1
1985	--	--	--	--	--	--	--	--
1988	4	1	1	1	1	1	1	1
1991	4	1	1	1	1	1	1	1
1992	--	--	--	--	--	--	--	--
1993	1	1	1	1	1	1	1	1
1995	--	--	--	--	--	--	--	--
2002	--	--	--	--	--	--	--	--
2004	--	--	--	--	--	--	--	--
2005	1	1	1	1	1	1	1	1
2008	1	1	1	1	1	1	1	1

MEAN	2	1	1	1	1	1	1	1
SD	1.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0
N	50	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 1-M:0 mg base/kg/day							
1011	1	1	1	2	1	3	1
1012	--	--	--	--	--	--	--
1013	1	1	2	2	1	3	1
1021	1	1	2	2	1	5	1
1023	--	--	--	--	--	--	--
1024	1	1	1	2	1	3	1
1025	--	--	--	--	--	--	--
1031	--	--	--	--	--	--	--
1032	1	1	1	2	1	3	1
1034	--	--	--	--	--	--	--
1036	1	1	2	1	1	3	1
1043	1	1	1	1	1	3	1
1045	--	--	--	--	--	--	--
1046	--	--	--	--	--	--	--
1047	1	1	2	1	1	3	1
1052	1	1	2	1	1	1	1
1053	--	--	--	--	--	--	--
1054	1	1	2	1	1	2	1
1056	--	--	--	--	--	--	--
1063	--	--	--	--	--	--	--
1064	--	--	--	--	--	--	--
1065	1	1	2	2	4	3	1
1066	1	1	1	2	4	3	1
1071	1	1	2	1	1	3	1
1072	1	1	2	1	1	3	1
1073	--	--	--	--	--	--	--
1081	--	--	--	--	--	--	--
1082	--	--	--	--	--	--	--
1083	1	1	1	1	1	2	1
1084	1	1	3	2	1	3	1
1091	1	1	2	2	1	3	1
1092	--	--	--	--	--	--	--
1095	--	--	--	--	--	--	--
1097	1	1	2	1	1	3	1
1101	--	--	--	--	--	--	--
1102	1	1	2	2	1	3	1
1104	1	1	2	1	1	3	1
1105	--	--	--	--	--	--	--
1111	--	--	--	--	--	--	--

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 1-M:0 mg base/kg/day							
1112	1	1	1	1	1	3	1
1113	1	1	2	1	1	3	1
1123	--	--	--	--	--	--	--
1125	1	1	2	2	1	3	1
1127	1	1	2	1	1	3	1
1128	--	--	--	--	--	--	--
1131	--	--	--	--	--	--	--
1134	--	--	--	--	--	--	--
1135	1	1	2	1	1	3	1
1136	1	1	2	1	1	3	1
1142	--	--	--	--	--	--	--
1146	1	1	2	2	2	3	1
1148	1	1	1	2	1	3	1
1149	--	--	--	--	--	--	--
1151	--	--	--	--	--	--	--
1152	1	1	1	2	2	3	1
1153	1	1	2	2	1	3	1
1155	--	--	--	--	--	--	--
1161	1	1	2	1	1	3	1
1162	1	1	2	2	1	3	1
1163	--	--	--	--	--	--	--
1164	--	--	--	--	--	--	--
1171	--	--	--	--	--	--	--
1173	1	1	2	2	1	3	1
1174	1	1	2	2	1	3	1
1175	--	--	--	--	--	--	--
1182	--	--	--	--	--	--	--
1185	1	1	2	2	1	3	1
1188	--	--	--	--	--	--	--
1189	1	1	2	2	1	1	1
1191	--	--	--	--	--	--	--
1192	1	1	2	2	1	5	1
1193	1	1	2	2	1	3	1
1195	--	--	--	--	--	--	--
1202	1	1	1	2	1	3	1
1203	1	1	1	2	1	3	1
1204	--	--	--	--	--	--	--
1205	--	--	--	--	--	--	--
1212	--	--	--	--	--	--	--

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 1-M:0 mg base/kg/day							
1214	1	1	2	1	1	5	1
1215	1	1	2	2	1	1	1
1216	--	--	--	--	--	--	--
1222	--	--	--	--	--	--	--
1223	1	1	2	2	2	3	1
1225	--	--	--	--	--	--	--
1226	1	1	2	2	1	3	1
1231	--	--	--	--	--	--	--
1233	1	1	2	1	2	3	1
1236	1	1	2	2	1	3	1
1237	--	--	--	--	--	--	--
1242	1	1	2	2	1	3	1
1243	--	--	--	--	--	--	--
1245	--	--	--	--	--	--	--
1248	1	1	1	2	1	3	1
1251	1	1	2	2	1	3	1
12515	1	1	2	2	1	3	1
MEAN	1	1	2	2	1	3	1
SD	0.0	0.0	0.5	0.5	0.6	0.7	0.0
N	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DATA

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACQURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 2-M:2 mg base/kg/day							
1263	--	--	--	--	--	--	--
1264	1	1	2	1	1	5	1
1266	--	--	--	--	--	--	--
1267	1	1	2	1	1	3	1
1271	--	--	--	--	--	--	--
1275	1	1	2	2	3	3	1
1277	1	1	2	1	1	3	1
1278	--	--	--	--	--	--	--
1282	--	--	--	--	--	--	--
1283	1	1	2	2	1	3	1
1284	--	--	--	--	--	--	--
1286	1	1	1	1	1	3	1
1292	--	--	--	--	--	--	--
1294	--	--	--	--	--	--	--
1295	1	1	1	2	1	4	1
1296	1	1	2	4	1	3	1
1301	--	--	--	--	--	--	--
1302	--	--	--	--	--	--	--
1307	1	1	1	1	1	3	1
1309	1	1	1	2	1	1	1
1311	1	1	2	1	1	3	1
1312	1	1	1	2	1	3	1
1313	--	--	--	--	--	--	--
1322	1	1	2	1	1	3	1
1323	1	1	3	1	1	3	1
1324	--	--	--	--	--	--	--
1325	--	--	--	--	--	--	--
1331	1	1	2	1	1	3	2
1332	--	--	--	--	--	--	--
1333	1	1	2	2	1	3	1
1341	1	1	2	1	2	3	1
1342	--	--	--	--	--	--	--
1343	1	1	2	2	1	3	1
1351	--	--	--	--	--	--	--
1352	--	--	--	--	--	--	--
1353	1	1	2	1	1	3	1
1354	1	1	2	1	1	3	1
1361	1	1	2	1	3	3	1
1362	--	--	--	--	--	--	--

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
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GROUP: 2-M:2 mg base/kg/day

1363	--	--	--	--	--	--	--
1365	1	1	2	2	1	3	1
1375	1	1	2	2	2	3	1
1376	--	--	--	--	--	--	--
1378	--	--	--	--	--	--	--
1379	1	1	1	1	2	5	1
1382	1	1	2	1	1	3	1
1383	1	1	2	1	1	3	1
1386	--	--	--	--	--	--	--
1387	--	--	--	--	--	--	--
1391	--	--	--	--	--	--	--
1392	1	1	2	2	1	3	1
1393	--	--	--	--	--	--	--
1394	1	1	2	2	1	3	1
1401	1	1	2	2	1	3	1
1402	--	--	--	--	--	--	--
1404	1	1	2	2	1	3	1
1406	--	--	--	--	--	--	--
1414	1	1	2	2	1	2	1
1415	1	1	2	1	2	3	1
1417	--	--	--	--	--	--	--
1419	--	--	--	--	--	--	--
1421	1	1	1	1	1	3	1
1426	--	--	--	--	--	--	--
1427	--	--	--	--	--	--	--
1428	1	1	1	2	1	3	1
1431	--	--	--	--	--	--	--
1432	1	1	2	1	1	3	1
1433	--	--	--	--	--	--	--
1434	1	1	2	2	1	3	1
1441	--	--	--	--	--	--	--
1442	--	--	--	--	--	--	--
1443	1	1	2	2	1	3	1
1444	1	1	2	2	1	2	1
1451	--	--	--	--	--	--	--
1452	1	1	2	2	1	3	1
1453	--	--	--	--	--	--	--
1454	1	1	3	2	1	3	1
1461	1	2	2	2	1	3	1

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 2-M:2 mg base/kg/day							
1463	1	1	1	2	1	3	1
1464	--	--	--	--	--	--	--
1465	--	--	--	--	--	--	--
1472	--	--	--	--	--	--	--
1473	--	--	--	--	--	--	--
1474	1	1	2	2	1	3	1
1475	1	1	2	1	1	3	1
1481	--	--	--	--	--	--	--
1483	1	1	1	1	1	3	1
1484	1	1	1	2	1	3	1
1485	--	--	--	--	--	--	--
1491	1	1	2	2	1	3	1
1492	--	--	--	--	--	--	--
1493	1	1	2	1	1	2	1
1501	1	1	1	1	1	3	1
1502	1	1	1	2	1	1	1
1503	--	--	--	--	--	--	--
1504	--	--	--	--	--	--	--
MEAN	1	1	2	2	1	3	1
SD	0.0	0.1	0.5	0.6	0.5	0.6	0.1
N	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

000007

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 3-M:6 mg base/kg/day							
1511	1	1	1	1	1	3	1
1513	--	--	--	--	--	--	--
1514	--	--	--	--	--	--	--
1515	1	1	1	2	1	3	1
1521	--	--	--	--	--	--	--
1523	1	1	1	2	4	3	1
1524	1	1	1	2	1	3	1
1528	--	--	--	--	--	--	--
1531	--	--	--	--	--	--	--
1532	1	1	2	1	1	3	1
1533	1	1	2	1	1	3	1
1534	--	--	--	--	--	--	--
1541	--	--	--	--	--	--	--
1542	1	1	2	1	1	3	1
1544	1	1	1	1	1	3	1
1545	--	--	--	--	--	--	--
1552	--	--	--	--	--	--	--
1554	1	1	2	1	1	3	1
1555	1	1	2	1	1	3	1
1556	--	--	--	--	--	--	--
1561	1	1	2	1	1	3	1
1564	--	--	--	--	--	--	--
1566	1	1	1	1	1	3	1
1567	--	--	--	--	--	--	--
1571	1	1	2	1	1	3	1
1572	--	--	--	--	--	--	--
1574	1	1	1	1	1	3	1
1576	--	--	--	--	--	--	--
1581	--	--	--	--	--	--	--
1583	--	--	--	--	--	--	--
1584	1	1	2	2	1	3	1
1585	1	1	2	1	1	3	1
1603	1	1	2	2	1	3	1
1604	--	--	--	--	--	--	--
1605	1	1	1	2	1	3	1
1607	--	--	--	--	--	--	--
1611	1	1	2	1	1	5	1
1612	1	1	2	2	1	3	1
1613	--	--	--	--	--	--	--

(--) - Data Unavailable

Note: There were no animals for F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID FUR DIA ACQUIRES APPRES TOUCHRES TPINCH AIRRIGHT

GROUP: 3-M:6 mg base/kg/day

1614	--	--	--	--	--	--	--
1622	1	1	1	2	1	3	1
1623	--	--	--	--	--	--	--
1624	--	--	--	--	--	--	--
1625	1	1	1	1	1	3	1
1631	--	--	--	--	--	--	--
1634	1	1	2	2	2	3	1
1635	--	--	--	--	--	--	--
1636	1	1	1	2	1	3	2
1642	--	--	--	--	--	--	--
1644	1	1	1	2	1	3	1
1646	1	1	2	2	1	3	1
1647	--	--	--	--	--	--	--
1652	1	1	2	1	1	3	1
1654	--	--	--	--	--	--	--
1655	--	--	--	--	--	--	--
1658	1	1	2	2	1	1	1
1661	1	1	2	1	1	3	3
1662	--	--	--	--	--	--	--
1664	1	1	1	2	1	3	1
1665	--	--	--	--	--	--	--
1671	--	--	--	--	--	--	--
1672	1	1	1	2	1	3	1
1673	1	1	3	1	1	3	1
1674	--	--	--	--	--	--	--
1681	1	1	1	2	1	3	1
1685	1	1	1	2	1	1	1
1687	--	--	--	--	--	--	--
1689	--	--	--	--	--	--	--
1691	1	1	2	2	1	3	1
1692	1	1	2	1	1	3	1
1693	--	--	--	--	--	--	--
1695	--	--	--	--	--	--	--
1704	1	1	1	1	1	3	1
1705	--	--	--	--	--	--	--
1706	1	1	1	1	1	3	1
1707	--	--	--	--	--	--	--
1712	--	--	--	--	--	--	--
1714	1	1	2	1	1	3	1

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 3-M:6 mg base/kg/day							
1715	1	1	1	2	1	3	1
1716	--	--	--	--	--	--	--
1723	1	1	2	2	2	3	1
1726	--	--	--	--	--	--	--
1727	1	1	2	1	1	5	1
1728	--	--	--	--	--	--	--
1733	1	1	2	2	2	3	1
1734	1	1	1	1	1	3	1
1735	--	--	--	--	--	--	--
1737	--	--	--	--	--	--	--
1741	1	1	2	2	1	1	1
1742	--	--	--	--	--	--	--
1743	1	1	1	1	1	3	1
1746	--	--	--	--	--	--	--
1751	--	--	--	--	--	--	--
1752	--	--	--	--	--	--	--
1754	1	1	1	1	1	3	1
1755	1	1	2	2	1	3	1
MEAN	1	1	2	1	1	3	1
SD	0.0	0.0	0.5	0.5	0.5	0.7	0.3
N	48	48	48	48	48	48	48

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEAT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 4-M:18 mg base/kg/day							
1761	--	--	--	--	--	--	--
1762	1	1	1	1	1	3	1
1763	1	1	1	2	1	3	1
1764	--	--	--	--	--	--	--
1771	--	--	--	--	--	--	--
1772	--	--	--	--	--	--	--
1773	1	1	2	2	4	3	1
1774	1	1	2	2	1	3	1
1781	--	--	--	--	--	--	--
1782	1	1	2	1	1	3	1
1783	1	1	1	1	1	3	1
1791	--	--	--	--	--	--	--
1792	1	1	2	1	1	3	1
1793	--	--	--	--	--	--	--
1795	1	1	2	2	2	3	1
1801	1	1	1	1	1	3	1
1804	--	--	--	--	--	--	--
1806	1	1	1	2	1	3	1
1807	--	--	--	--	--	--	--
1811	--	--	--	--	--	--	--
1812	--	--	--	--	--	--	--
1813	1	1	1	1	1	3	1
1814	1	1	1	2	1	3	1
1821	--	--	--	--	--	--	--
1822	--	--	--	--	--	--	--
1823	1	1	2	2	1	3	2
1824	1	1	2	2	1	3	1
1831	1	1	1	1	1	3	1
1833	--	--	--	--	--	--	--
1835	1	1	2	1	1	1	1
1836	--	--	--	--	--	--	--
1843	--	--	--	--	--	--	--
1844	--	--	--	--	--	--	--
1845	1	1	1	1	1	3	1
1846	1	1	2	1	1	1	1
1851	--	--	--	--	--	--	--
1852	1	1	2	1	3	3	1
1853	1	1	2	1	1	3	1
1855	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
-----------	-----	-----	---------	--------	----------	--------	----------

GROUP: 4-M:18 mg base/kg/day

1861	1	1	2	1	1	3	1
1863	--	--	--	--	--	--	--
1864	--	--	--	--	--	--	--
1865	1	1	2	1	1	3	1
1872	--	--	--	--	--	--	--
1873	1	1	2	1	2	3	1
1875	1	1	1	1	1	3	1
1876	--	--	--	--	--	--	--
1882	1	1	1	1	1	1	1
1883	1	1	1	1	1	3	1
1887	--	--	--	--	--	--	--
1888	--	--	--	--	--	--	--
1892	--	--	--	--	--	--	--
1894	1	1	1	1	1	3	1
1897	1	1	1	1	1	3	1
1898	--	--	--	--	--	--	--
1901	1	1	2	2	2	2	1
1902	--	--	--	--	--	--	--
1904	1	1	2	2	1	2	1
1912	1	1	2	2	1	3	1
1914	1	1	1	2	1	3	1
1916	--	--	--	--	--	--	--
1917	--	--	--	--	--	--	--
1921	1	1	2	1	2	3	1
1922	--	--	--	--	--	--	--
1924	1	1	2	1	2	3	1
1925	--	--	--	--	--	--	--
1931	--	--	--	--	--	--	--
1933	--	--	--	--	--	--	--
1934	1	1	2	2	1	3	1
1936	1	1	1	2	1	3	1
1941	1	1	2	2	2	3	2
1942	1	1	2	1	1	3	1
1943	--	--	--	--	--	--	--
1944	--	--	--	--	--	--	--
1951	--	--	--	--	--	--	--
1952	1	1	2	2	1	3	1
1953	--	--	--	--	--	--	--
1956	1	1	2	2	1	3	1

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: MALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
-----------	-----	-----	---------	--------	----------	--------	----------

GROUP: 4-M:18 mg base/kg/day

1962	1	1	2	2	2	3	2
1964	--	--	--	--	--	--	--
1965	1	1	3	2	2	5	1
1966	--	--	--	--	--	--	--
1971	--	--	--	--	--	--	--
1972	1	1	2	2	2	3	1
1973	--	--	--	--	--	--	--
1974	1	1	2	1	1	5	2
1981	--	--	--	--	--	--	--
1982	1	1	2	2	1	3	2
1985	--	--	--	--	--	--	--
1988	1	1	1	2	2	3	1
1991	1	1	2	2	2	3	1
1992	--	--	--	--	--	--	--
1993	1	1	2	2	1	3	1
1995	--	--	--	--	--	--	--
2002	--	--	--	--	--	--	--
2004	--	--	--	--	--	--	--
2005	1	1	1	2	1	3	1
2008	1	1	1	2	1	3	1

MEAN	1	1	2	2	1	3	1
SD	0.0	0.0	0.5	0.5	0.6	0.7	0.3
N	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 1-F:0 mg base/kg/day								
10112	11	0	0	1	1	36.3	94.0	4
10113	5	0	0	0	0	37.2	97.0	4
10115	--	--	--	--	--	--	--	--
10117	--	--	--	--	--	--	--	--
10214	7	0	1	0	0	36.4	84.0	2
10215	--	--	--	--	--	--	--	--
10217	10	0	1	0	0	36.3	91.0	2
10218	--	--	--	--	--	--	--	--
10312	--	--	--	--	--	--	--	--
10313	--	--	--	--	--	--	--	--
10315	7	0	1	3	0	36.2	83.0	3
10318	5	0	2	1	0	35.0	85.0	3
10411	--	--	--	--	--	--	--	--
10412	4	27	1	1	0	37.5	84.0	1
10413	8	0	0	2	1	37.4	79.0	1
10415	--	--	--	--	--	--	--	--
10511	7	0	0	3	4	37.9	85.0	1
10512	--	--	--	--	--	--	--	--
10513	6	0	0	0	0	37.1	89.0	2
10611	--	--	--	--	--	--	--	--
10614	12	0	0	0	0	33.1	90.0	2
10615	--	--	--	--	--	--	--	--
10616	2	0	0	3	0	34.1	89.0	2
10711	--	--	--	--	--	--	--	--
10712	10	0	0	0	0	33.2	83.0	2
10713	6	0	2	2	0	35.4	77.0	2
10714	--	--	--	--	--	--	--	--
10811	--	--	--	--	--	--	--	--
10813	10	0	0	3	0	36.7	104.0	4
10815	13	0	1	0	0	36.1	101.0	4
10816	--	--	--	--	--	--	--	--
10911	16	0	0	1	13	37.3	88.0	2
11011	--	--	--	--	--	--	--	--
11012	8	0	0	0	0	36.6	95.0	3
11014	--	--	--	--	--	--	--	--
11015	18	0	0	0	0	36.9	105.0	3
11111	11	0	0	0	0	36.3	90.0	2
11113	--	--	--	--	--	--	--	--
11116	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 1-F:0 mg base/kg/day								
11117	17	0	0	1	0	35.3	82.0	2
11211	--	--	--	--	--	--	--	--
11212	9	0	1	0	0	36.5	77.0	2
11213	5	0	1	0	0	36.7	87.0	2
11311	--	--	--	--	--	--	--	--
11312	--	--	--	--	--	--	--	--
11315	10	0	0	5	2	36.4	91.0	1
11316	15	0	2	3	3	35.7	98.0	1
11411	--	--	--	--	--	--	--	--
11412	7	0	2	0	0	33.8	79.0	3
11413	--	--	--	--	--	--	--	--
11414	5	0	2	1	0	35.2	87.0	3
11511	8	0	1	1	0	34.0	79.0	4
11513	--	--	--	--	--	--	--	--
11514	--	--	--	--	--	--	--	--
11519	12	0	2	2	0	34.8	73.0	3
11611	5	0	0	3	0	35.8	90.0	2
11612	8	0	1	1	4	36.3	87.0	2
11616	--	--	--	--	--	--	--	--
11617	--	--	--	--	--	--	--	--
11711	3	0	1	1	2	34.6	87.0	2
11712	7	0	2	0	0	35.2	81.0	2
11811	--	--	--	--	--	--	--	--
11812	9	0	0	0	0	36.1	97.0	2
11813	--	--	--	--	--	--	--	--
11814	7	0	0	3	0	36.2	92.0	1
11911	8	0	0	0	0	35.4	90.0	2
11913	--	--	--	--	--	--	--	--
11914	--	--	--	--	--	--	--	--
11915	5	0	0	0	0	33.6	101.0	2
12012	15	0	1	0	0	36.0	85.0	3
12013	10	0	0	1	12	33.6	86.0	3
12015	--	--	--	--	--	--	--	--
12016	--	--	--	--	--	--	--	--
12111	--	--	--	--	--	--	--	--
12113	11	0	0	1	0	37.0	86.0	1
12114	13	0	1	0	0	38.4	91.0	1
12117	--	--	--	--	--	--	--	--
12211	10	0	0	1	2	35.7	74.0	2

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 1-F:0 mg base/kg/day								
12212	--	--	--	--	--	--	--	--
12213	11	0	0	0	4	36.0	83.0	2
12311	--	--	--	--	--	--	--	--
12312	7	0	2	0	0	35.2	79.0	4
12313	6	0	2	0	0	35.8	77.0	4
12314	--	--	--	--	--	--	--	--
12411	10	0	0	0	0	35.0	68.0	4
12413	6	0	1	0	0	34.9	68.0	4
12415	--	--	--	--	--	--	--	--
12416	--	--	--	--	--	--	--	--
12511	8	0	0	4	3	36.6	87.0	3
12518	--	--	--	--	--	--	--	--
12519	7	0	2	0	0	37.0	90.0	3
12520	--	--	--	--	--	--	--	--
MEAN	9	1	1	1	1	35.8	86.6	2
SD	3.6	3.9	0.8	1.3	2.7	1.23	8.35	1.0
N	49	49	49	49	49	49	49	49

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200 STUDY NO: 200								SEX: FEMALE
Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 2-F:2 mg base/kg/day								
12611	5	0	0	3	0	36.6	95.0	3
12612	7	0	0	3	4	36.6	92.0	4
12711	--	--	--	--	--	--	--	--
12712	--	--	--	--	--	--	--	--
12715	9	32	0	3	0	34.2	72.0	4
12716	10	0	0	0	1	34.9	76.0	2
12811	--	--	--	--	--	--	--	--
12813	5	0	0	2	0	37.4	82.0	2
12814	--	--	--	--	--	--	--	--
12815	4	0	2	0	0	37.8	80.0	2
12911	15	0	0	0	0	35.7	88.0	3
12912	10	0	0	0	1	36.6	86.0	2
12913	--	--	--	--	--	--	--	--
13011	3	21	2	0	0	37.0	84.0	2
13012	--	--	--	--	--	--	--	--
13013	5	0	1	0	0	38.4	89.0	2
13014	--	--	--	--	--	--	--	--
13113	6	0	1	0	3	36.1	98.0	3
13114	10	0	0	0	0	37.0	98.0	3
13115	--	--	--	--	--	--	--	--
13119	--	--	--	--	--	--	--	--
13211	--	--	--	--	--	--	--	--
13212	3	16	0	0	0	37.2	96.0	2
13213	7	0	2	0	0	36.9	98.0	2
13311	--	--	--	--	--	--	--	--
13315	15	0	0	0	4	36.4	93.0	2
13317	8	0	0	0	2	36.5	96.0	2
13318	--	--	--	--	--	--	--	--
13412	8	0	0	1	0	37.6	79.0	1
13413	--	--	--	--	--	--	--	--
13414	4	0	3	0	0	36.3	83.0	1
13417	--	--	--	--	--	--	--	--
13512	19	0	1	3	12	36.9	88.0	1
13513	--	--	--	--	--	--	--	--
13514	--	--	--	--	--	--	--	--
13515	8	0	2	1	0	36.1	84.0	3
13612	6	23	0	3	2	36.9	98.0	4
13614	8	0	2	1	0	34.0	97.0	4
13615	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 2-F:2 mg base/kg/day								
13616	--	--	--	--	--	--	--	--
13711	6	0	0	1	0	37.4	91.0	4
13713	9	0	2	0	0	37.8	101.0	4
13811	16	0	0	6	0	35.5	87.0	3
13812	--	--	--	--	--	--	--	--
13814	--	--	--	--	--	--	--	--
13815	20	0	0	4	2	35.5	100.0	3
13911	--	--	--	--	--	--	--	--
13912	15	0	1	0	0	35.4	93.0	4
13913	9	0	2	0	0	36.9	90.0	3
13916	--	--	--	--	--	--	--	--
14011	12	0	0	2	0	34.5	79.0	3
14012	--	--	--	--	--	--	--	--
14014	5	0	0	2	2	34.8	77.0	3
14015	--	--	--	--	--	--	--	--
14111	9	0	0	1	0	35.5	83.0	1
14112	8	0	1	0	0	35.4	82.0	1
14211	--	--	--	--	--	--	--	--
14212	7	0	2	2	0	36.9	76.0	1
14213	7	0	1	0	0	36.7	80.0	1
14314	11	0	0	0	0	35.0	80.0	4
14315	8	0	0	2	0	34.5	79.0	4
14316	--	--	--	--	--	--	--	--
14317	--	--	--	--	--	--	--	--
14412	6	0	2	2	0	36.2	89.0	2
14414	--	--	--	--	--	--	--	--
14416	6	0	1	3	0	35.3	87.0	1
14417	--	--	--	--	--	--	--	--
14511	8	0	2	0	0	36.6	69.0	4
14512	--	--	--	--	--	--	--	--
14514	10	16	1	1	1	35.4	66.0	4
14516	--	--	--	--	--	--	--	--
14612	--	--	--	--	--	--	--	--
14613	6	0	1	0	3	36.5	90.0	3
14614	--	--	--	--	--	--	--	--
14615	15	0	1	5	0	35.4	89.0	3
14712	6	0	1	1	2	35.4	86.0	1
14713	--	--	--	--	--	--	--	--
14714	11	0	0	0	0	35.5	82.0	2

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 2-F:2 mg base/kg/day								
14715	--	--	--	--	--	--	--	--
14811	9	0	1	0	4	37.3	82.0	3
14812	12	0	1	2	0	36.4	83.0	3
14813	--	--	--	--	--	--	--	--
14816	--	--	--	--	--	--	--	--
14912	--	--	--	--	--	--	--	--
14913	6	0	1	3	0	35.3	88.0	2
14914	--	--	--	--	--	--	--	--
14916	12	0	0	0	0	34.4	77.0	2
15011	11	0	1	2	1	36.2	78.0	3
15013	12	0	2	0	0	35.8	82.0	3
15014	--	--	--	--	--	--	--	--
15015	--	--	--	--	--	--	--	--
MEAN	9	2	1	1	1	36.1	86.0	3
SD	3.9	6.8	0.9	1.5	2.0	1.03	8.22	1.0
N	50	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 3-F:6 mg base/kg/day								
15111	--	--	--	--	--	--	--	--
15112	9	0	1	0	0	37.2	83.0	2
15114	--	--	--	--	--	--	--	--
15115	12	0	1	0	18	36.6	90.0	2
15211	5	0	1	0	0	35.4	83.0	2
15212	--	--	--	--	--	--	--	--
15213	8	0	0	0	0	33.6	86.0	2
15215	--	--	--	--	--	--	--	--
15311	--	--	--	--	--	--	--	--
15313	13	0	0	0	0	35.6	85.0	4
15314	6	0	0	1	0	36.1	79.0	3
15315	--	--	--	--	--	--	--	--
15412	6	0	2	0	0	37.0	82.0	2
15413	--	--	--	--	--	--	--	--
15415	--	--	--	--	--	--	--	--
15416	2	0	2	0	0	36.5	88.0	2
15511	--	--	--	--	--	--	--	--
15513	15	0	1	3	0	35.9	86.0	1
15515	--	--	--	--	--	--	--	--
15518	12	0	0	3	0	35.1	88.0	1
15611	8	0	1	0	0	35.9	91.0	1
15614	--	--	--	--	--	--	--	--
15615	--	--	--	--	--	--	--	--
15617	10	0	2	0	0	37.5	86.0	1
15712	10	0	2	1	0	36.9	93.0	2
15714	10	0	3	0	7	36.7	105.0	2
15716	--	--	--	--	--	--	--	--
15717	--	--	--	--	--	--	--	--
15812	--	--	--	--	--	--	--	--
15813	--	--	--	--	--	--	--	--
15814	7	31	0	1	0	35.0	79.0	3
15816	8	0	0	0	6	34.4	79.0	3
16011	8	0	1	0	0	35.0	85.0	2
16013	--	--	--	--	--	--	--	--
16014	--	--	--	--	--	--	--	--
16015	6	0	0	0	0	36.8	89.0	2
16111	--	--	--	--	--	--	--	--
16112	--	--	--	--	--	--	--	--
16113	14	0	3	0	0	35.5	72.0	2

(--) - Data Unavailable

Note: There were no animals for F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 3-F:6 mg base/kg/day								
16114	12	0	3	3	1	36.5	75.0	2
16211	1	11	2	0	0	37.4	88.0	2
16214	--	--	--	--	--	--	--	--
16215	--	--	--	--	--	--	--	--
16216	7	0	1	3	0	37.3	84.0	3
16311	10	0	1	2	7	35.8	76.0	2
16313	7	23	0	0	0	34.9	78.0	2
16314	--	--	--	--	--	--	--	--
16316	--	--	--	--	--	--	--	--
16412	9	0	1	0	6	37.3	74.0	2
16413	4	0	3	0	0	36.8	76.0	2
16511	--	--	--	--	--	--	--	--
16512	--	--	--	--	--	--	--	--
16513	7	0	2	0	0	34.5	85.0	4
16514	8	0	2	2	8	35.4	79.0	3
16613	9	0	0	1	0	35.2	83.0	2
16614	9	0	0	0	0	32.8	77.0	2
16615	--	--	--	--	--	--	--	--
16617	--	--	--	--	--	--	--	--
16711	13	0	1	0	0	32.9	78.0	2
16712	--	--	--	--	--	--	--	--
16713	--	--	--	--	--	--	--	--
16714	8	0	0	0	0	33.9	76.0	2
16811	--	--	--	--	--	--	--	--
16812	--	--	--	--	--	--	--	--
16813	7	0	1	2	0	36.6	84.0	2
16814	4	0	1	0	14	36.5	84.0	2
16911	15	0	1	0	1	35.5	79.0	2
16912	--	--	--	--	--	--	--	--
16913	13	0	0	2	1	33.4	83.0	2
16914	--	--	--	--	--	--	--	--
17014	--	--	--	--	--	--	--	--
17015	--	--	--	--	--	--	--	--
17016	10	0	4	0	0	35.5	89.0	2
17018	10	0	0	3	2	35.1	84.0	2
17111	4	0	1	0	0	35.2	88.0	2
17112	--	--	--	--	--	--	--	--
17114	--	--	--	--	--	--	--	--
17115	12	0	0	1	1	36.2	84.0	2

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 3-F:6 mg base/kg/day								
17212	16	0	1	0	0	35.2	73.0	3
17214	--	--	--	--	--	--	--	--
17215	6	0	2	0	0	34.3	68.0	3
17216	--	--	--	--	--	--	--	--
17311	12	0	0	2	4	36.0	90.0	1
17312	18	0	0	0	3	35.2	88.0	1
17411	13	0	0	1	0	34.4	91.0	3
17412	--	--	--	--	--	--	--	--
17413	11	0	1	2	1	34.8	102.0	3
17414	--	--	--	--	--	--	--	--
17511	--	--	--	--	--	--	--	--
17513	13	0	0	4	0	36.2	82.0	4
17515	--	--	--	--	--	--	--	--
17516	7	0	0	0	0	35.8	70.0	4
MEAN	9	1	1	1	2	35.6	83.3	2
SD	3.7	5.7	1.1	1.2	3.7	1.17	7.27	0.8
N	48	48	48	48	48	48	48	48

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DATA

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 4-F:18 mg base/kg/day								
17611	--	--	--	--	--	--	--	--
17612	--	--	--	--	--	--	--	--
17614	13	0	0	0	0	36.3	--	2
17616	7	0	2	2	1	36.5	--	2
17712	7	0	1	5	3	38.0	--	2
17713	5	0	2	0	0	38.2	--	2
17715	6	15	1	0	0	--	--	--
17718	--	--	--	--	--	--	--	--
17811	--	--	--	--	--	--	--	--
17815	--	--	--	--	--	36.0	--	2
17816	1	14	1	5	3	34.4	--	2
17818	--	--	--	--	--	--	--	--
17911	10	0	1	3	0	36.0	78.0	4
17912	11	0	1	1	6	34.1	88.0	4
17913	--	--	--	--	--	--	--	--
18012	--	--	--	--	--	--	--	--
18013	6	0	1	3	0	36.5	77.0	1
18014	5	0	3	0	0	35.9	72.0	1
18016	--	--	--	--	--	--	--	--
18112	11	0	1	0	0	37.4	62.0	2
18114	--	--	--	--	--	--	--	--
18115	--	--	--	--	--	--	--	--
18116	10	0	1	4	0	37.1	74.0	2
18213	18	0	0	0	0	36.3	69.0	4
18214	12	0	1	0	0	37.2	76.0	4
18216	--	--	--	--	--	--	--	--
18218	--	--	--	--	--	--	--	--
18312	--	--	--	--	--	--	--	--
18315	8	0	2	1	0	36.7	98.0	2
18316	--	--	--	--	--	--	--	--
18317	11	0	3	0	0	35.1	92.0	2
18411	3	0	1	5	4	37.7	72.0	2
18412	--	--	--	--	--	--	--	--
18414	--	--	--	--	--	--	--	--
18416	4	0	0	0	0	37.0	89.0	2
18511	8	0	0	1	0	35.7	93.0	4
18512	--	--	--	--	--	--	--	--
18515	12	0	2	0	1	36.0	93.0	4
18516	13	0	0	1	0	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 4-F:18 mg base/kg/day								
18611	--	--	--	--	--	36.8	76.0	4
18613	18	0	2	3	0	35.0	74.0	4
18614	--	--	--	--	--	--	--	--
18615	--	--	--	--	--	--	--	--
18712	11	0	0	2	0	37.4	79.0	4
18713	--	--	--	--	--	--	--	--
18714	9	0	2	0	0	37.1	74.0	4
18715	--	--	--	--	--	--	--	--
18811	--	--	--	--	--	--	--	--
18812	14	0	1	0	0	35.3	83.0	1
18813	--	--	--	--	--	--	--	--
18815	13	0	0	0	11	36.6	86.0	1
18911	7	0	2	3	0	37.9	67.0	2
18912	9	0	1	0	0	37.0	55.0	2
18914	--	--	--	--	--	--	--	--
19012	7	0	3	0	0	35.6	66.0	2
19018	--	--	--	--	--	--	--	--
19019	9	0	0	2	0	35.3	66.0	2
19020	--	--	--	--	--	--	--	--
19111	--	--	--	--	--	--	--	--
19112	6	0	4	0	0	34.8	91.0	3
19113	--	--	--	--	--	--	--	--
19114	6	0	1	0	1	34.8	85.0	3
19212	--	--	--	--	--	--	--	--
19213	--	--	--	--	--	--	--	--
19214	9	0	1	2	0	33.3	66.0	3
19215	7	0	2	3	0	33.0	66.0	4
19311	--	--	--	--	--	--	--	--
19315	7	0	0	0	0	37.7	79.0	3
19316	--	--	--	--	--	--	--	--
19317	9	0	0	1	2	38.0	71.0	3
19413	--	--	--	--	--	--	--	--
19415	5	0	2	0	0	35.3	83.0	2
19416	7	0	0	0	0	35.5	87.0	2
19417	--	--	--	--	--	--	--	--
19511	--	--	--	--	--	--	--	--
19512	13	0	0	0	2	36.3	75.0	4
19513	--	--	--	--	--	--	--	--
19514	6	0	4	0	0	36.6	71.0	4

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	SNIFFINGS #	FREEZE Seconds	GROOMING #	FECALS #	URINE #	BT C	BW g	POST -
GROUP: 4-F:18 mg base/kg/day								
19611	--	--	--	--	--	--	--	--
19613	6	0	0	2	0	35.8	73.0	4
19615	--	--	--	--	--	--	--	--
19617	7	0	0	2	1	35.6	77.0	4
19712	--	--	--	--	--	--	--	--
19714	--	--	--	--	--	--	--	--
19715	9	0	0	0	0	36.0	68.0	4
19716	11	0	3	0	0	34.9	68.0	4
19811	--	--	--	--	--	--	--	--
19812	10	0	2	0	0	36.7	79.0	3
19813	--	--	--	--	--	--	--	--
19814	10	0	1	2	0	36.4	81.0	3
19911	--	--	--	--	--	--	--	--
19912	13	0	3	1	0	35.4	61.0	3
19914	--	--	--	--	--	--	--	--
19915	18	0	0	0	0	34.3	61.0	3
20011	8	0	0	0	0	35.4	86.0	4
20012	20	0	0	0	1	35.3	81.0	4
20013	--	--	--	--	--	--	--	--
MEAN	9	1	1	1	1	36.1	76.5	3
SD	4.0	2.9	1.1	1.5	1.9	1.19	9.97	1.0
N	50	50	50	50	50	50	44	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 1-F:0 mg base/kg/day								
10112	1	1	1	1	1	1	1	1
10113	1	1	1	1	1	1	1	1
10115	--	--	--	--	--	--	--	--
10117	--	--	--	--	--	--	--	--
10214	1	1	1	1	1	1	1	1
10215	--	--	--	--	--	--	--	--
10217	1	1	1	1	1	1	1	1
10218	--	--	--	--	--	--	--	--
10312	--	--	--	--	--	--	--	--
10313	--	--	--	--	--	--	--	--
10315	1	1	1	1	1	1	1	1
10318	1	1	1	1	1	1	1	1
10411	--	--	--	--	--	--	--	--
10412	4	1	1	1	1	2	1	1
10413	4	1	1	1	1	1	1	1
10415	--	--	--	--	--	--	--	--
10511	4	1	1	1	1	2	1	1
10512	--	--	--	--	--	--	--	--
10513	2	1	1	1	1	1	1	1
10611	--	--	--	--	--	--	--	--
10614	1	1	1	1	1	1	1	1
10615	--	--	--	--	--	--	--	--
10616	1	1	1	1	1	1	1	1
10711	--	--	--	--	--	--	--	--
10712	1	1	1	1	1	1	1	1
10713	1	1	1	1	1	1	1	1
10714	--	--	--	--	--	--	--	--
10811	--	--	--	--	--	--	--	--
10813	1	1	1	1	1	1	1	1
10815	1	1	1	1	1	1	1	1
10816	--	--	--	--	--	--	--	--
10911	1	1	1	1	1	1	1	1
11011	--	--	--	--	--	--	--	--
11012	1	1	1	1	1	1	1	1
11014	--	--	--	--	--	--	--	--
11015	1	1	1	1	1	1	1	1
11111	1	1	1	1	1	1	1	1
11113	--	--	--	--	--	--	--	--
11116	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

000001

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP	CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
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GROUP: 1-F:0 mg base/kg/day

11117	1		1	1	1	1	1	1	1
11211	--	--	--	--	--	--	--	--	--
11212	2	1	1	1	1	1	1	1	1
11213	2	1	1	1	1	1	1	1	1
11311	--	--	--	--	--	--	--	--	--
11312	--	--	--	--	--	--	--	--	--
11315	4	1	1	1	1	1	1	1	1
11316	4	1	1	1	1	1	1	1	1
11411	--	--	--	--	--	--	--	--	--
11412	1	1	1	1	1	1	1	1	1
11413	--	--	--	--	--	--	--	--	--
11414	1	1	1	1	1	1	1	1	1
11511	1	1	1	1	1	1	1	1	1
11513	--	--	--	--	--	--	--	--	--
11514	--	--	--	--	--	--	--	--	--
11519	1	1	1	1	1	1	1	1	1
11611	1	1	1	1	1	1	1	1	1
11612	1	1	1	1	1	1	1	1	1
11616	--	--	--	--	--	--	--	--	--
11617	--	--	--	--	--	--	--	--	--
11711	1	1	1	1	1	1	1	1	1
11712	1	1	1	1	1	1	1	1	1
11811	--	--	--	--	--	--	--	--	--
11812	1	1	1	1	1	1	1	1	1
11813	--	--	--	--	--	--	--	--	--
11814	4	1	1	1	1	1	1	1	1
11911	1	1	1	1	1	1	1	1	1
11913	--	--	--	--	--	--	--	--	--
11914	--	--	--	--	--	--	--	--	--
11915	1	1	1	1	1	1	1	1	1
12012	1	1	1	1	1	1	1	1	1
12013	1	1	1	1	1	1	1	1	1
12015	--	--	--	--	--	--	--	--	--
12016	--	--	--	--	--	--	--	--	--
12111	--	--	--	--	--	--	--	--	--
12113	4	1	1	1	1	1	1	1	1
12114	4	1	1	1	1	1	1	1	1
12117	--	--	--	--	--	--	--	--	--
12211	1	1	1	1	1	1	1	1	1

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200								SEX: FEMALE	
STUDY NO: 200									
Animal ID	PALP	CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHANO	LAC	SAL
GROUP: 1-F:0 mg base/kg/day									
12212	--	--	--	--	--	--	--	--	--
12213	1	1	1	1	1	1	1	1	1
12311	--	--	--	--	--	--	--	--	--
12312	1	1	1	1	1	1	1	1	1
12313	1	1	1	1	1	1	1	1	1
12314	--	--	--	--	--	--	--	--	--
12411	1	1	1	1	1	1	1	1	1
12413	1	1	1	1	1	1	1	1	1
12415	--	--	--	--	--	--	--	--	--
12416	--	--	--	--	--	--	--	--	--
12511	1	1	1	1	1	1	1	1	1
12518	--	--	--	--	--	--	--	--	--
12519	1	1	1	1	1	1	1	1	1
12520	--	--	--	--	--	--	--	--	--
MEAN	2	1	1	1	1	1	1	1	1
SD	1.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
N	49	49	49	49	49	49	49	49	49

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 2-F:2 mg base/kg/day								
12611	1	1	1	1	1	1	1	1
12612	1	1	1	1	1	1	1	1
12711	--	--	--	--	--	--	--	--
12712	--	--	--	--	--	--	--	--
12715	1	1	1	1	1	1	1	1
12716	1	1	1	1	1	1	1	1
12811	--	--	--	--	--	--	--	--
12813	1	1	1	1	1	1	1	1
12814	--	--	--	--	--	--	--	--
12815	1	1	1	1	1	1	1	1
12911	1	1	1	1	1	1	1	1
12912	1	1	1	1	1	1	1	1
12913	--	--	--	--	--	--	--	--
13011	1	1	1	1	1	1	1	1
13012	--	--	--	--	--	--	--	--
13013	1	1	1	1	1	1	1	1
13014	--	--	--	--	--	--	--	--
13113	1	1	1	1	1	1	1	1
13114	1	1	1	1	1	1	1	1
13115	--	--	--	--	--	--	--	--
13119	--	--	--	--	--	--	--	--
13211	--	--	--	--	--	--	--	--
13212	2	1	1	1	1	1	1	1
13213	2	1	1	1	1	1	1	1
13311	--	--	--	--	--	--	--	--
13315	1	1	1	1	1	1	1	1
13317	1	1	1	1	1	1	1	1
13318	--	--	--	--	--	--	--	--
13412	4	1	1	1	1	1	1	1
13413	--	--	--	--	--	--	--	--
13414	4	1	1	1	1	1	1	1
13417	--	--	--	--	--	--	--	--
13512	4	1	1	1	1	2	1	1
13513	--	--	--	--	--	--	--	--
13514	--	--	--	--	--	--	--	--
13515	1	1	1	1	1	2	1	1
13612	1	1	1	1	1	1	1	1
13614	1	1	1	1	1	1	1	1
13615	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 2-F:2 mg base/kg/day								
13616	--	--	--	--	--	--	--	--
13711	1	1	1	1	1	1	1	1
13713	1	1	1	1	1	1	1	1
13811	1	1	1	1	1	2	1	1
13812	--	--	--	--	--	--	--	--
13814	--	--	--	--	--	--	--	--
13815	1	1	1	1	1	1	1	1
13911	--	--	--	--	--	--	--	--
13912	1	1	1	1	1	1	1	1
13913	1	1	1	1	1	1	1	1
13916	--	--	--	--	--	--	--	--
14011	1	1	1	1	1	1	1	1
14012	--	--	--	--	--	--	--	--
14014	1	1	1	1	1	1	1	1
14015	--	--	--	--	--	--	--	--
14111	4	1	1	1	1	1	1	1
14112	4	1	1	1	1	1	1	1
14211	--	--	--	--	--	--	--	--
14212	4	1	1	1	1	1	1	1
14213	4	1	1	1	1	1	1	1
14314	1	1	1	1	1	1	1	1
14315	1	1	1	1	1	1	1	1
14316	--	--	--	--	--	--	--	--
14317	--	--	--	--	--	--	--	--
14412	3	1	1	1	1	1	1	1
14414	--	--	--	--	--	--	--	--
14416	4	1	1	1	1	1	1	1
14417	--	--	--	--	--	--	--	--
14511	1	1	1	1	1	1	1	1
14512	--	--	--	--	--	--	--	--
14514	1	1	1	1	1	1	1	1
14516	--	--	--	--	--	--	--	--
14612	--	--	--	--	--	--	--	--
14613	1	1	1	1	1	1	1	1
14614	--	--	--	--	--	--	--	--
14615	1	1	1	1	1	1	1	1
14712	4	1	1	1	1	1	1	1
14713	--	--	--	--	--	--	--	--
14714	3	1	1	1	1	1	1	1

(--) - Data Unavailable

Note: There were no animals for F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

000007

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
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GROUP: 2-F:2 mg base/kg/day

14715	--	--	--	--	--	--	--	--
14811	1	1	1	1	1	1	1	1
14812	1	1	1	1	1	1	1	1
14813	--	--	--	--	--	--	--	--
14816	--	--	--	--	--	--	--	--
14912	--	--	--	--	--	--	--	--
14913	1	1	1	1	1	1	1	1
14914	--	--	--	--	--	--	--	--
14916	1	1	1	1	1	1	1	1
15011	1	1	1	1	1	1	1	1
15013	1	1	1	1	1	1	1	1
15014	--	--	--	--	--	--	--	--
15015	--	--	--	--	--	--	--	--

MEAN	2	1	1	1	1	1	1	1
SD	1.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
N	50	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200								SEX: FEMALE	
STUDY NO: 200									
Animal ID	PALP	CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 3-F:6 mg base/kg/day									
15111	--	--	--	--	--	--	--	--	--
15112	1	1	1	1	1	1	1	1	1
15114	--	--	--	--	--	--	--	--	--
15115	1	1	1	1	1	1	1	1	1
15211	1	1	1	1	1	1	1	1	1
15212	--	--	--	--	--	--	--	--	--
15213	1	1	1	1	1	1	1	1	1
15215	--	--	--	--	--	--	--	--	--
15311	--	--	--	--	--	--	--	--	--
15313	1	1	1	1	1	1	1	1	1
15314	1	1	1	1	1	1	1	1	1
15315	--	--	--	--	--	--	--	--	--
15412	1	1	1	1	1	1	1	1	1
15413	--	--	--	--	--	--	--	--	--
15415	--	--	--	--	--	--	--	--	--
15416	1	1	1	1	1	1	1	1	1
15511	--	--	--	--	--	--	--	--	--
15513	4	1	1	1	1	1	1	1	1
15515	--	--	--	--	--	--	--	--	--
15518	4	1	1	1	1	1	1	1	1
15611	4	1	1	1	1	1	1	1	1
15614	--	--	--	--	--	--	--	--	--
15615	--	--	--	--	--	--	--	--	--
15617	4	1	1	1	1	1	1	1	1
15712	1	1	1	1	1	1	1	1	1
15714	1	1	1	1	1	1	1	1	1
15716	--	--	--	--	--	--	--	--	--
15717	--	--	--	--	--	--	--	--	--
15812	--	--	--	--	--	--	--	--	--
15813	--	--	--	--	--	--	--	--	--
15814	1	1	1	1	1	1	1	1	1
15816	1	1	1	1	1	1	1	1	1
16011	1	1	1	1	1	1	1	1	1
16013	--	--	--	--	--	--	--	--	--
16014	--	--	--	--	--	--	--	--	--
16015	1	1	1	1	1	1	1	1	1
16111	--	--	--	--	--	--	--	--	--
16112	--	--	--	--	--	--	--	--	--
16113	1	1	1	1	1	1	1	1	1

(--) - Data Unavailable

Note: There were no animals for F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
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GROUP: 3-F:6 mg base/kg/day

16114	1	1	1	1	1	1	1	1
16211	2	1	1	1	1	1	1	1
16214	--	--	--	--	--	--	--	--
16215	--	--	--	--	--	--	--	--
16216	1	1	1	1	1	1	1	1
16311	1	1	1	1	1	1	1	1
16313	1	1	1	1	1	1	1	1
16314	--	--	--	--	--	--	--	--
16316	--	--	--	--	--	--	--	--
16412	1	1	1	1	1	1	1	1
16413	1	1	1	1	1	1	1	1
16511	--	--	--	--	--	--	--	--
16512	--	--	--	--	--	--	--	--
16513	1	1	1	1	1	1	1	1
16514	1	1	1	1	1	1	1	1
16613	1	1	1	1	1	1	1	1
16614	1	1	1	1	1	1	1	1
16615	--	--	--	--	--	--	--	--
16617	--	--	--	--	--	--	--	--
16711	1	1	1	1	1	1	1	1
16712	--	--	--	--	--	--	--	--
16713	--	--	--	--	--	--	--	--
16714	1	1	1	1	1	1	1	1
16811	--	--	--	--	--	--	--	--
16812	--	--	--	--	--	--	--	--
16813	1	1	1	1	1	1	1	1
16814	1	1	1	1	1	1	1	1
16911	1	1	1	1	1	1	1	1
16912	--	--	--	--	--	--	--	--
16913	2	1	1	1	1	1	1	1
16914	--	--	--	--	--	--	--	--
17014	--	--	--	--	--	--	--	--
17015	--	--	--	--	--	--	--	--
17016	1	1	1	1	1	1	1	1
17018	1	1	1	1	1	1	1	1
17111	1	1	1	1	1	1	1	1
17112	--	--	--	--	--	--	--	--
17114	--	--	--	--	--	--	--	--
17115	1	1	1	1	1	1	1	1

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEATH

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 3-F:6 mg base/kg/day								
17212	1	1	1	1	1	1	1	1
17214	--	--	--	--	--	--	--	--
17215	1	1	1	1	1	1	1	1
17216	--	--	--	--	--	--	--	--
17311	4	1	1	1	1	1	1	1
17312	4	1	1	1	1	1	1	1
17411	1	1	1	1	1	1	1	1
17412	--	--	--	--	--	--	--	--
17413	1	1	1	1	1	1	1	1
17414	--	--	--	--	--	--	--	--
17511	--	--	--	--	--	--	--	--
17513	1	1	1	1	1	1	1	1
17515	--	--	--	--	--	--	--	--
17516	1	1	1	1	1	1	1	1
MEAN	1	1	1	1	1	1	1	1
SD	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	48	48	48	48	48	48	48	48

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP	CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 4-F:18 mg base/kg/day									
17611	--	--	--	--	--	--	--	--	--
17612	--	--	--	--	--	--	--	--	--
17614	1	1	1	1	1	1	1	1	1
17616	1	1	1	1	1	1	1	1	1
17712	1	1	1	1	1	1	1	1	1
17713	1	1	1	1	1	1	1	1	1
17715	--	--	--	--	--	--	--	--	--
17718	--	--	--	--	--	--	--	--	--
17811	--	--	--	--	--	--	--	--	--
17815	1	1	1	1	1	1	1	1	1
17816	1	1	1	1	1	1	1	1	1
17818	--	--	--	--	--	--	--	--	--
17911	1	1	1	1	1	1	1	1	1
17912	1	1	1	1	1	1	1	1	1
17913	--	--	--	--	--	--	--	--	--
18012	--	--	--	--	--	--	--	--	--
18013	4	1	1	1	1	1	1	1	1
18014	4	1	1	1	1	1	1	1	1
18016	--	--	--	--	--	--	--	--	--
18112	1	1	1	1	1	1	1	1	1
18114	--	--	--	--	--	--	--	--	--
18115	--	--	--	--	--	--	--	--	--
18116	1	1	1	1	1	1	1	1	1
18213	1	1	1	1	1	1	1	1	1
18214	1	1	1	1	1	1	2	1	1
18216	--	--	--	--	--	--	--	--	--
18218	--	--	--	--	--	--	--	--	--
18312	--	--	--	--	--	--	--	--	--
18315	1	1	1	1	1	1	1	1	1
18316	--	--	--	--	--	--	--	--	--
18317	1	1	1	1	1	1	1	1	1
18411	1	1	1	1	1	1	1	1	1
18412	--	--	--	--	--	--	--	--	--
18414	--	--	--	--	--	--	--	--	--
18416	1	1	1	1	1	1	1	1	1
18511	1	1	1	1	1	1	1	1	1
18512	--	--	--	--	--	--	--	--	--
18515	1	1	1	1	1	1	1	1	1
18516	--	--	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP	CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 4-F:18 mg base/kg/day									
18611	1		1	1	1	1	1	1	1
18613	1		1	1	1	1	2	1	1
18614	--	--	--	--	--	--	--	--	--
18615	--	--	--	--	--	--	--	--	--
18712	1		1	1	1	1	1	1	1
18713	--	--	--	--	--	--	--	--	--
18714	1		1	1	1	1	1	1	1
18715	--	--	--	--	--	--	--	--	--
18811	--	--	--	--	--	--	--	--	--
18812	4		1	1	1	1	1	1	1
18813	--	--	--	--	--	--	--	--	--
18815	4		1	1	1	1	1	1	1
18911	1		1	1	1	1	1	2	1
18912	1		1	1	1	1	1	1	1
18914	--	--	--	--	--	--	--	--	--
19012	1		1	1	1	1	1	1	1
19018	--	--	--	--	--	--	--	--	--
19019	1		1	1	1	1	1	1	1
19020	--	--	--	--	--	--	--	--	--
19111	--	--	--	--	--	--	--	--	--
19112	1		1	1	1	1	2	1	1
19113	--	--	--	--	--	--	--	--	--
19114	1		1	1	1	1	1	1	1
19212	--	--	--	--	--	--	--	--	--
19213	--	--	--	--	--	--	--	--	--
19214	1		1	1	1	1	1	1	1
19215	1		1	1	1	1	1	1	1
19311	--	--	--	--	--	--	--	--	--
19315	1		1	1	1	1	1	1	1
19316	--	--	--	--	--	--	--	--	--
19317	1		1	1	1	1	1	1	1
19413	--	--	--	--	--	--	--	--	--
19415	1		1	1	1	3	1	1	1
19416	1		1	1	1	1	1	1	1
19417	--	--	--	--	--	--	--	--	--
19511	--	--	--	--	--	--	--	--	--
19512	1		1	1	1	1	1	1	1
19513	--	--	--	--	--	--	--	--	--
19514	1		1	1	1	1	1	1	1

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	PALP	CLOS	CON/TREMOR	BIT	VOC	EASEREM	EASEHAND	LAC	SAL
GROUP: 4-F:18 mg base/kg/day									
19611	--	--	--	--	--	--	--	--	--
19613	1	1	1	1	1	1	1	1	1
19615	--	--	--	--	--	--	--	--	--
19617	1	1	1	1	1	1	1	1	1
19712	--	--	--	--	--	--	--	--	--
19714	--	--	--	--	--	--	--	--	--
19715	1	1	1	1	1	1	1	1	1
19716	1	1	1	1	1	1	1	1	1
19811	--	--	--	--	--	--	--	--	--
19812	1	1	1	1	1	1	1	1	1
19813	--	--	--	--	--	--	--	--	--
19814	1	1	1	1	1	1	1	1	1
19911	--	--	--	--	--	--	--	--	--
19912	1	1	1	1	1	1	1	1	1
19914	--	--	--	--	--	--	--	--	--
19915	1	1	1	1	1	1	1	1	1
20011	1	1	1	1	1	1	1	1	1
20012	1	1	1	1	1	1	1	1	1
20013	--	--	--	--	--	--	--	--	--
MEAN	1	1	1	1	1	1	1	1	1
SD	0.8	0.0	0.0	0.0	0.0	0.3	0.2	0.1	0.0
N	50	50	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 1-F:0 mg base/kg/day							
10112	1	1	2	2	1	3	1
10113	1	1	2	2	1	3	1
10115	--	--	--	--	--	--	--
10117	--	--	--	--	--	--	--
10214	1	1	1	1	1	3	1
10215	--	--	--	--	--	--	--
10217	1	1	1	2	1	3	1
10218	--	--	--	--	--	--	--
10312	--	--	--	--	--	--	--
10313	--	--	--	--	--	--	--
10315	1	1	2	2	1	3	2
10318	1	1	1	1	1	3	1
10411	--	--	--	--	--	--	--
10412	1	1	1	1	3	3	1
10413	1	1	2	1	2	3	1
10415	--	--	--	--	--	--	--
10511	1	1	1	1	1	3	1
10512	--	--	--	--	--	--	--
10513	1	1	1	2	1	3	1
10611	--	--	--	--	--	--	--
10614	1	1	3	2	4	3	1
10615	--	--	--	--	--	--	--
10616	1	1	3	2	1	3	1
10711	--	--	--	--	--	--	--
10712	1	1	2	1	1	3	1
10713	1	1	2	1	1	3	1
10714	--	--	--	--	--	--	--
10811	--	--	--	--	--	--	--
10813	1	1	1	2	1	3	1
10815	1	1	1	1	1	3	1
10816	--	--	--	--	--	--	--
10911	1	1	2	1	1	5	1
11011	--	--	--	--	--	--	--
11012	1	1	2	2	1	3	1
11014	--	--	--	--	--	--	--
11015	1	1	1	1	1	3	1
11111	1	1	2	1	1	3	1
11113	--	--	--	--	--	--	--
11116	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP
PERIOD: Week 4

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 1-F:0 mg base/kg/day							
11117	1	1	2	1	1	3	1
11211	--	--	--	--	--	--	--
11212	1	1	1	2	1	3	1
11213	1	1	2	1	1	3	1
11311	--	--	--	--	--	--	--
11312	--	--	--	--	--	--	--
11315	1	1	3	1	1	5	1
11316	1	1	3	3	3	3	1
11411	--	--	--	--	--	--	--
11412	1	1	2	2	1	3	1
11413	--	--	--	--	--	--	--
11414	1	1	2	2	1	1	1
11511	1	1	1	2	1	5	1
11513	--	--	--	--	--	--	--
11514	--	--	--	--	--	--	--
11519	1	2	2	2	1	3	1
11611	1	1	2	2	1	3	1
11612	1	1	1	2	2	3	1
11616	--	--	--	--	--	--	--
11617	--	--	--	--	--	--	--
11711	1	1	2	2	2	5	1
11712	1	1	2	2	1	3	1
11811	--	--	--	--	--	--	--
11812	1	1	2	2	1	3	1
11813	--	--	--	--	--	--	--
11814	1	1	2	2	1	3	1
11911	1	1	3	2	2	3	1
11913	--	--	--	--	--	--	--
11914	--	--	--	--	--	--	--
11915	1	1	2	2	1	3	1
12012	1	1	1	2	1	3	1
12013	1	1	1	2	1	3	1
12015	--	--	--	--	--	--	--
12016	--	--	--	--	--	--	--
12111	--	--	--	--	--	--	--
12113	1	1	2	2	3	3	1
12114	1	1	1	1	1	3	1
12117	--	--	--	--	--	--	--
12211	1	1	3	2	1	3	1

(--) - Data Unavailable

DRAFT

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 1-F:0 mg base/kg/day							
12212	--	--	--	--	--	--	--
12213	1	1	2	2	1	5	1
12311	--	--	--	--	--	--	--
12312	1	1	2	2	1	3	1
12313	1	1	1	2	2	3	1
12314	--	--	--	--	--	--	--
12411	1	1	2	2	1	3	1
12413	1	1	2	1	2	2	1
12415	--	--	--	--	--	--	--
12416	--	--	--	--	--	--	--
12511	1	1	1	2	1	3	1
12518	--	--	--	--	--	--	--
12519	1	1	1	2	2	3	1
12520	--	--	--	--	--	--	--
MEAN	1	1	2	2	1	3	1
SD	0.0	0.1	0.7	0.5	0.7	0.7	0.1
N	49	49	49	49	49	49	49

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 2-F:2 mg base/kg/day							
12611	1	1	2	1	1	3	1
12612	1	1	2	1	1	3	1
12711	--	--	--	--	--	--	--
12712	--	--	--	--	--	--	--
12715	1	1	2	2	2	3	1
12716	1	1	2	2	3	3	1
12811	--	--	--	--	--	--	--
12813	1	1	1	2	1	3	1
12814	--	--	--	--	--	--	--
12815	1	1	2	2	1	3	1
12911	1	1	2	2	1	3	1
12912	1	1	1	2	1	3	1
12913	--	--	--	--	--	--	--
13011	1	1	1	1	1	3	1
13012	--	--	--	--	--	--	--
13013	1	1	2	2	1	3	1
13014	--	--	--	--	--	--	--
13113	1	1	1	2	1	3	1
13114	1	1	1	2	1	3	1
13115	--	--	--	--	--	--	--
13119	--	--	--	--	--	--	--
13211	--	--	--	--	--	--	--
13212	1	1	2	2	1	3	1
13213	1	1	2	1	1	3	1
13311	--	--	--	--	--	--	--
13315	1	1	2	1	1	3	1
13317	1	1	2	1	1	3	1
13318	--	--	--	--	--	--	--
13412	1	1	2	1	1	3	1
13413	--	--	--	--	--	--	--
13414	1	1	2	1	2	3	1
13417	--	--	--	--	--	--	--
13512	1	1	2	1	1	3	1
13513	--	--	--	--	--	--	--
13514	--	--	--	--	--	--	--
13515	1	1	2	2	1	3	1
13612	1	1	2	1	1	5	1
13614	1	1	2	2	3	3	1
13615	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 2-F:2 mg base/kg/day							
13616	--	--	--	--	--	--	--
13711	1	1	2	2	1	3	1
13713	1	1	2	2	1	3	1
13811	1	2	2	1	1	3	1
13812	--	--	--	--	--	--	--
13814	--	--	--	--	--	--	--
13815	1	1	2	1	1	1	1
13911	--	--	--	--	--	--	--
13912	1	1	2	2	2	3	1
13913	1	1	2	2	2	3	1
13916	--	--	--	--	--	--	--
14011	1	1	2	2	1	3	1
14012	--	--	--	--	--	--	--
14014	1	1	2	2	1	3	1
14015	--	--	--	--	--	--	--
14111	1	2	2	2	1	3	1
14112	1	1	2	2	1	5	1
14211	--	--	--	--	--	--	--
14212	1	1	2	2	1	3	1
14213	1	1	1	1	1	3	1
14314	1	1	1	2	1	3	1
14315	1	1	2	2	2	2	1
14316	--	--	--	--	--	--	--
14317	--	--	--	--	--	--	--
14412	1	1	2	2	2	3	1
14414	--	--	--	--	--	--	--
14416	1	1	2	2	1	3	1
14417	--	--	--	--	--	--	--
14511	1	1	2	2	2	3	2
14512	--	--	--	--	--	--	--
14514	1	1	2	2	1	3	1
14516	--	--	--	--	--	--	--
14612	--	--	--	--	--	--	--
14613	1	1	2	2	1	3	1
14614	--	--	--	--	--	--	--
14615	1	1	1	1	1	3	1
14712	1	1	2	2	2	2	1
14713	--	--	--	--	--	--	--
14714	1	1	3	2	2	3	1

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

000001

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACQURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
-----------	-----	-----	---------	--------	----------	--------	----------

GROUP: 2-F:2 mg base/kg/day

14715	--	--	--	--	--	--	--
14811	1	1	2	1	1	3	1
14812	1	1	1	1	1	3	1
14813	--	--	--	--	--	--	--
14816	--	--	--	--	--	--	--
14912	--	--	--	--	--	--	--
14913	1	1	2	2	1	3	3
14914	--	--	--	--	--	--	--
14916	1	1	2	1	1	3	1
15011	1	1	1	2	1	1	1
15013	1	1	1	1	1	1	1
15014	--	--	--	--	--	--	--
15015	--	--	--	--	--	--	--

MEAN	1	1	2	2	1	3	1
SD	0.0	0.2	0.5	0.5	0.5	0.7	0.3
N	50	50	50	50	50	50	50

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 3-F:6 mg base/kg/day							
15111	--	--	--	--	--	--	--
15112	1	1	1	1	1	3	1
15114	--	--	--	--	--	--	--
15115	1	1	2	2	1	3	1
15211	1	1	2	2	3	5	1
15212	--	--	--	--	--	--	--
15213	1	1	1	2	1	3	1
15215	--	--	--	--	--	--	--
15311	--	--	--	--	--	--	--
15313	1	1	2	2	1	3	1
15314	1	1	2	1	1	3	1
15315	--	--	--	--	--	--	--
15412	1	1	1	4	1	3	1
15413	--	--	--	--	--	--	--
15415	--	--	--	--	--	--	--
15416	1	1	2	2	1	3	1
15511	--	--	--	--	--	--	--
15513	1	1	2	1	1	3	1
15515	--	--	--	--	--	--	--
15518	1	1	1	1	1	3	1
15611	1	1	2	1	1	3	1
15614	--	--	--	--	--	--	--
15615	--	--	--	--	--	--	--
15617	1	1	1	1	1	3	1
15712	1	1	1	2	1	3	1
15714	1	1	1	1	1	3	1
15716	--	--	--	--	--	--	--
15717	--	--	--	--	--	--	--
15812	--	--	--	--	--	--	--
15813	--	--	--	--	--	--	--
15814	1	1	1	1	1	3	1
15816	1	1	2	1	1	3	1
16011	1	1	2	1	1	3	1
16013	--	--	--	--	--	--	--
16014	--	--	--	--	--	--	--
16015	1	1	2	1	1	3	1
16111	--	--	--	--	--	--	--
16112	--	--	--	--	--	--	--
16113	1	1	2	1	1	3	1

(--) - Data Unavailable

Note: There were no animals for F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 3-F:6 mg base/kg/day							
16114	1	1	1	1	1	5	1
16211	1	1	2	2	1	3	1
16214	--	--	--	--	--	--	--
16215	--	--	--	--	--	--	--
16216	1	1	1	1	1	3	1
16311	1	1	2	2	2	3	1
16313	1	1	2	1	2	3	1
16314	--	--	--	--	--	--	--
16316	--	--	--	--	--	--	--
16412	1	1	1	2	1	3	1
16413	1	1	2	2	1	3	1
16511	--	--	--	--	--	--	--
16512	--	--	--	--	--	--	--
16513	1	1	2	2	1	3	1
16514	1	1	2	2	1	2	1
16613	1	1	2	2	1	3	1
16614	1	1	2	2	1	3	1
16615	--	--	--	--	--	--	--
16617	--	--	--	--	--	--	--
16711	1	1	1	2	1	3	3
16712	--	--	--	--	--	--	--
16713	--	--	--	--	--	--	--
16714	1	1	1	2	1	3	1
16811	--	--	--	--	--	--	--
16812	--	--	--	--	--	--	--
16813	1	1	1	2	1	3	1
16814	1	1	1	1	1	3	1
16911	1	1	2	2	2	3	1
16912	--	--	--	--	--	--	--
16913	1	1	1	2	2	3	1
16914	--	--	--	--	--	--	--
17014	--	--	--	--	--	--	--
17015	--	--	--	--	--	--	--
17016	1	1	2	2	2	3	1
17018	1	1	1	2	1	3	1
17111	1	1	2	1	1	3	1
17112	--	--	--	--	--	--	--
17114	--	--	--	--	--	--	--
17115	1	1	2	2	1	5	1

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 3-F:6 mg base/kg/day							
17212	1	1	2	2	2	4	1
17214	--	--	--	--	--	--	--
17215	1	1	2	2	1	5	1
17216	--	--	--	--	--	--	--
17311	1	1	1	2	1	3	1
17312	1	1	1	2	3	3	1
17411	1	1	1	2	3	3	1
17412	--	--	--	--	--	--	--
17413	1	1	2	2	1	1	1
17414	--	--	--	--	--	--	--
17511	--	--	--	--	--	--	--
17513	1	1	2	2	2	3	1
17515	--	--	--	--	--	--	--
17516	1	1	2	2	1	3	1
MEAN	1	1	2	2	1	3	1
SD	0.0	0.0	0.5	0.6	0.6	0.7	0.3
N	48	48	48	48	48	48	48

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
-----------	-----	-----	---------	--------	----------	--------	----------

GROUP: 4-F:18 mg base/kg/day

17611	--	--	--	--	--	--	--
17612	--	--	--	--	--	--	--
17614	1	1	2	2	1	3	1
17616	1	1	1	1	1	3	1
17712	1	1	1	1	1	3	1
17713	1	1	3	2	1	3	1
17715	--	--	--	--	--	--	--
17718	--	--	--	--	--	--	--
17811	--	--	--	--	--	--	--
17815	1	1	2	1	3	3	1
17816	1	1	2	1	1	3	1
17818	--	--	--	--	--	--	--
17911	1	1	2	2	1	3	1
17912	1	1	2	2	1	3	1
17913	--	--	--	--	--	--	--
18012	--	--	--	--	--	--	--
18013	1	1	1	2	1	3	1
18014	1	1	2	2	3	3	1
18016	--	--	--	--	--	--	--
18112	1	1	1	2	2	3	1
18114	--	--	--	--	--	--	--
18115	--	--	--	--	--	--	--
18116	1	1	1	2	1	3	1
18213	1	1	1	1	1	3	1
18214	1	1	2	1	1	3	1
18216	--	--	--	--	--	--	--
18218	--	--	--	--	--	--	--
18312	--	--	--	--	--	--	--
18315	1	1	3	2	1	3	1
18316	--	--	--	--	--	--	--
18317	1	1	2	1	1	1	1
18411	1	1	1	2	3	3	1
18412	--	--	--	--	--	--	--
18414	--	--	--	--	--	--	--
18416	1	1	1	1	1	3	1
18511	1	1	1	1	1	3	1
18512	--	--	--	--	--	--	--
18515	1	1	2	2	2	5	1
18516	--	--	--	--	--	--	--

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACCURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
-----------	-----	-----	---------	--------	----------	--------	----------

GROUP: 4-F:18 mg base/kg/day

18611	1	1	2	1	1	3	1
18613	1	1	1	1	1	3	1
18614	--	--	--	--	--	--	--
18615	--	--	--	--	--	--	--
18712	1	1	2	1	2	3	1
18713	--	--	--	--	--	--	--
18714	1	1	1	2	3	3	1
18715	--	--	--	--	--	--	--
18811	--	--	--	--	--	--	--
18812	1	1	1	2	1	3	1
18813	--	--	--	--	--	--	--
18815	1	1	1	1	1	3	1
18911	1	1	1	2	1	2	1
18912	1	1	1	2	1	3	1
18914	--	--	--	--	--	--	--
19012	1	1	1	2	1	5	1
19018	--	--	--	--	--	--	--
19019	1	1	2	2	1	3	1
19020	--	--	--	--	--	--	--
19111	--	--	--	--	--	--	--
19112	1	1	2	2	1	3	1
19113	--	--	--	--	--	--	--
19114	1	1	2	1	1	2	1
19212	--	--	--	--	--	--	--
19213	--	--	--	--	--	--	--
19214	1	1	2	1	1	3	1
19215	1	1	2	1	2	2	1
19311	--	--	--	--	--	--	--
19315	1	1	2	2	1	3	1
19316	--	--	--	--	--	--	--
19317	1	1	1	2	1	3	1
19413	--	--	--	--	--	--	--
19415	1	1	2	1	2	5	1
19416	1	1	2	2	1	3	1
19417	--	--	--	--	--	--	--
19511	--	--	--	--	--	--	--
19512	1	1	1	2	1	3	1
19513	--	--	--	--	--	--	--
19514	1	1	2	2	3	3	1

(--) - Data Unavailable

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00007

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	FUR	DIA	ACOURES	APPRES	TOUCHRES	TPINCH	AIRRIGHT
GROUP: 4-F:18 mg base/kg/day							
19611	--	--	--	--	--	--	--
19613	1	1	1	2	2	3	1
19615	--	--	--	--	--	--	--
19617	1	1	2	2	1	3	1
19712	--	--	--	--	--	--	--
19714	--	--	--	--	--	--	--
19715	1	1	2	2	1	3	1
19716	1	1	2	2	1	3	1
19811	--	--	--	--	--	--	--
19812	1	1	1	2	2	5	1
19813	--	--	--	--	--	--	--
19814	1	1	2	2	3	3	1
19911	--	--	--	--	--	--	--
19912	1	1	2	2	2	3	1
19914	--	--	--	--	--	--	--
19915	1	1	1	2	2	3	1
20011	1	1	1	1	3	3	1
20012	1	1	1	1	3	3	1
20013	--	--	--	--	--	--	--
MEAN	1	1	2	2	2	3	1
SD	0.0	0.0	0.6	0.5	0.8	0.7	0.0
N	50	50	50	50	50	50	50

(--) - Data Unavailable

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APPENDIX L
INDIVIDUAL F₁ GENERATION MOTOR ACTIVITY DATA

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: MALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
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GROUP: 1-M:0 mg base/kg/day

10101	5563	247	2349
10103	3160	68	597
10201	6790	1447	4780
10204	6169	264	3237
10302	6834	150	2664
10306	7110	348	3928
10403 ^e	--	--	--
10407 ^e	--	--	--
10502	7308	327	3195
10504	7388	484	3484
10605	5979	264	2620
10606	7814	992	2927
10701	7850	758	3750
10702	5982	93	1778
10803	4993	123	1699
10804	6768	282	3004
10901	6959	736	3300
10907	7267	1154	2138
11002	7582	990	3840
11004	8764	1508	3651
11102	8689	1480	3979
11103	8085	536	4386
11205	5638	16	1461
11207	6459	208	1542
11305	5807	805	1702
11306	5505	237	1726
11406	7124	637	2346
11408	6695	586	5419
11502	5646	499	2083
11503	5746	479	1816
11601	6259	176	4568
11602	6309	84	2867
11703	6481	133	2534
11704	6603	457	2324
11805	6635	611	2494
11809	6664	405	2489
11902	6724	284	3186
11903	7288	700	2799
12002	6407	303	2747

(--)- Data Unavailable

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

^eActivity was recorded for these animals. However, due to a technical error, their data files could not be analyzed.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: MALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
GROUP: 1-M:0 mg base/kg/day			
12003	7536	194	3482
12104	7708	1071	5366
12105	6350	212	2090
12203	6367	369	2206
12206	6733	488	2868
12303	7984	570	3513
12306	6900	507	3185
12402	7231	706	4135
12408	7426	298	3145
12501	4061	3	1727
12515	6386	425	3954
MEAN	6661	494	2939
SD	1040.2	378.4	1039.7
N	48	48	48

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: MALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
GROUP: 2-M:2 mg base/kg/day			
12604	5229	291	4527
12607	4738	194	2108
12705	7157	454	3322
12707	7907	128	2655
12803	7067	553	2642
12806	6237	377	2700
12905	3000	97	1083
12906	3257	89	3692
13007	5724	69	2132
13009	6398	1213	3410
13101	8546	1250	3474
13102	7104	374	2404
13202	8807	1588	3558
13203	6573	1881	3192
13301	7365	442	2563
13303	6511	173	2925
13401	6994	430	2838
13403	6381	74	2123
13503	5563	729	3686
13504	7809	695	3577
13601	6418	793	2218
13605	5378	120	1430
13705	7248	921	4102
13709	7425	1766	4809
13802	7990	1050	3752
13803	7954	1678	3843
13902	6219	317	3288
13904	6774	654	3379
14001	6583	291	1942
14004	6528	696	1739
14104	6774	618	2834
14105	7606	311	3268
14201	6407	239	3524
14208	8153	335	2887
14302	7933	943	3807
14304	7395	421	3601
14403	6229	572	4696
14404	6706	401	3088
14502	5955	78	2083
14504	7089	311	3503
14601	7303	516	3561

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: MALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
GROUP: 2-M:2 mg base/kg/day			
14603	8449	817	4223
14704	8223	497	4735
14705	7358	412	3329
14803	6307	229	5003
14804	7135	510	3998
14901	5571	27	2447
14903	6131	369	3988
15001	6040	256	3056
15003	6037	68	3146
MEAN	6714	546	3198
SD	1168.8	459.7	878.4
N	50	50	50

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: MALE

Animal	10 HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
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GROUP: 3-M:6 mg base/kg/day

15101	6837	494	2701
15105	4993	177	2175
15203	6019	457	4825
15204	5351	537	2684
15302	8177	2494	4051
15303	7341	542	3604
15402	6434	250	3891
15404	7069	341	2951
15504	7472	588	2991
15505	6629	396	3772
15601	7569	564	2596
15606	5745	299	2376
15701	4281	0	476
15704	6245	295	2718
15804	6742	622	2267
15805	7770	550	3336
16003	4208	1	788
16005	4537	26	1288
16101	806	0	289
16102	7067	591	2305
16202	5992	153	2579
16205	7758	317	3385
16304	6874	928	4210
16306	6699	177	3009
16404	7930	1348	3556
16406	7192	301	3668
16502	6117	392	2918
16508	0	12000	3004
16601	7269	512	3800
16604	7245	478	3326
16702	7471	402	3329
16703	7382	1286	3634
16801	8007	232	3359
16805	7038	738	3174
16901	7110	372	2063
16902	0	12000	4485
17004	7933	623	3375
17006	7780	516	3878
17104	7792	415	3748
17105	8086	937	2498
17203	6081	470	2115

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

Note: There was no F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: MALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
GROUP: 3-M:6 mg base/kg/day			
17207	7258	223	2548
17303	5676	131	3390
17304	6621	437	2508
17401	6595	308	3275
17403	6853	86	2725
17504	6981	164	3378
17505	6764	221	3982
MEAN	6371	946	2979
SD	1861.8	2365.8	942.7
N	48	48	48

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: MALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
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GROUP: 4-M:18 mg base/kg/day

17602	5771	54	2393
17603	6631	158	2012
17703	7298	1761	4288
17704	8072	1254	3673
17802	7321	460	3645
17803	5878	298	2148
17902	6476	285	1911
17905	6579	728	2902
18001	7338	587	3723
18006	7563	831	4414
18103	5319	71	1432
18104	6906	315	3233
18203	6832	400	3197
18204	4785	121	1324
18301	7737	768	4556
18305	7898	915	3499
18405	4168	164	580
18406	4146	59	953
18502	6147	1110	2369
18503	7205	518	1295
18601	4817	1	1200
18605	5585	76	1880
18703	6142	71	2220
18705	7925	706	1692
18802	6866	371	3494
18803	7766	950	3357
18904	6127	491	1536
18907	5424	388	2044
19001	7126	235	2700
19004	5883	609	1848
19102	7611	1205	2905
19104	7384	772	3613
19201	7059	545	3317
19204	6506	240	2203
19304	7501	453	3529
19306	6926	301	2239
19401	6364	413	3536
19402	8899	642	3507
19502	7357	250	4016
19506	7654	1792	4206
19602	6496	115	1999

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: MALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
GROUP: 4-M:18 mg base/kg/day			
19605	0	12000	2993
19702	6129	268	2088
19704	6216	635	1616
19802	6409	667	3110
19808	5874	231	2796
19901	6981	353	3378
19903	8173	710	4036
20005	6774	533	2706
20008	7093	333	2587
MEAN	6543	744	2718
SD	1381.2	1672.8	986.3
N	50	50	50

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: FEMALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
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GROUP: 1-F:0 mg base/kg/day

10112	7468	1090	3101
10113	5757	11	2874
10214	6437	1139	3951
10217	7151	917	4401
10315	6117	369	2849
10318	6274	93	2694
10412	6049	277	2960
10413	5022	39	1707
10511	7461	649	3786
10513	7809	1065	4187
10614	6005	404	4126
10616	6493	256	3550
10712	5185	218	1642
10713	7382	916	3849
10813	8079	600	2443
10815	5570	126	2314
10911	7957	866	4739
11012	7559	2702	4087
11015	7770	628	5269
11111	7932	638	3078
11117	7685	1084	3906
11212	7352	853	2929
11213	4964	227	2426
11315	6051	993	3286
11316	6986	364	2795
11412	8157	1179	3990
11414	7250	1014	4589
11511	7165	552	4140
11519	6775	677	2603
11611	6736	306	3862
11612	7519	513	5522
11711	7958	884	4094
11712	7458	529	5430
11812	6192	295	5135
11814	6327	103	3023
11911	7116	1620	6840
11915	7861	337	4898
12012	6616	198	3791
12013	6058	115	3246
12113	7532	917	5466
12114	7765	477	6138

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: FEMALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
GROUP: 1-F:0 mg base/kg/day			
12211	7582	690	3550
12213	7933	1474	4391
12312	6968	2124	5371
12313	7385	1194	4230
12411	7313	1248	4735
12413	7194	2426	4274
12511	6730	1059	4921
12519	6733	1095	3612
MEAN	6956	766	3894
SD	836.3	589.0	1116.8
N	49	49	49

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

000001

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: FEMALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
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GROUP: 2-F:2 mg base/kg/day

12611	7511	461	3658
12612	2990	132	1451
12715	7313	371	2650
12716	7671	638	4130
12813	5797	70	2663
12815	6505	180	4256
12911	5500	166	1966
12912	4535	0	1352
13011	5499	38	1580
13013	6966	797	2806
13113	7149	554	3547
13114	8373	802	4161
13212	6029	312	2880
13213	6912	480	4298
13315	6972	664	4763
13317	6496	584	4191
13412	6637	836	3540
13414	6175	171	3484
13512	8192	686	3341
13515	6521	965	2226
13612	6583	221	3245
13614	7147	464	3364
13711	8081	991	5367
13713	7431	1007	5357
13811	6978	1494	5628
13815	7537	1019	6040
13912	7138	560	5406
13913	6628	294	3977
14011	5305	1349	2118
14014	5964	1940	3018
14111	7323	1667	6459
14112	6484	312	4288
14212	4928	249	2176
14213	6389	178	2816
14314	7602	541	4514
14315	8062	925	4175
14412	5896	888	3713
14416	6328	891	6052
14511	4407	124	2926
14514	6851	587	4266
14613	7387	506	4869

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: FEMALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
GROUP: 2-F:2 mg base/kg/day			
14615	8392	1153	3712
14712	6284	294	4655
14714	7458	459	4658
14811	7504	544	3793
14812	7358	637	4711
14913	6905	240	4362
14916	7800	602	4945
15011	6100	239	3710
15013	6636	44	5327
MEAN	6693	587	3852
SD	1066.0	431.0	1226.1
N	50	50	50

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: FEMALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
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GROUP: 3-F:6 mg base/kg/day

15112	5412	290	1677
15115	4292	65	1154
15211	5469	202	2697
15213	5877	329	1976
15313	8566	693	3630
15314	7287	392	3245
15412	6453	445	3206
15416	7335	482	2224
15513	7258	612	3401
15518	6838	219	3182
15611	6689	333	4234
15617	8047	592	3177
15712	5878	251	1710
15714	7427	328	4329
15814	6018	291	2367
15816	6428	537	2504
16011	4623	57	1470
16015	6886	698	2648
16113	5583	160	2811
16114	4537	216	2658
16211	6675	229	1522
16216	7247	354	3350
16311	6952	1064	4639
16313	6525	390	3884
16412	7413	437	3944
16413	5692	288	3718
16513	6349	520	3758
16514	0	12000	3370
16613	6166	576	3436
16614	7119	201	3194
16711	7342	453	4141
16714	6792	1564	4437
16813	7454	1691	5543
16814	6775	1097	5672
16911	7412	509	3938
16913	0	12000	1762
17016	7824	255	4907
17018	8544	490	4553
17111	7223	259	3423
17115	7532	149	4196
17212	8656	802	4011

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

Note: There were no animals for F₁ litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: FEMALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
GROUP: 3-F:6 mg base/kg/day			
17215	5880	119	2446
17311	6991	1833	4282
17312	7006	304	2985
17411	5758	328	3383
17413	6912	111	3586
17513	7194	552	6000
17516	7408	505	4975
MEAN	6453	964	3403
SD	1669.1	2357.5	1125.8
N	48	48	48

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

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ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: FEMALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
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GROUP: 4-F:18 mg base/kg/day

17614	7229	323	2635
17616	7649	364	3867
17712	7453	642	3230
17713	7482	617	3344
17815	7585	758	4085
17816	6000	300	1982
17911	7028	436	3264
17912	5350	360	1170
18013	7651	274	3004
18014	6749	859	2802
18112	6801	423	3697
18116	7413	454	4529
18213	6312	85	1948
18214	3498	35	527
18315	6589	323	2639
18317	7105	492	2408
18411	5892	281	2339
18416	6853	503	3551
18511	4577	24	1287
18515	7536	592	4095
18611	5832	446	4636
18613	8218	573	3307
18712	7227	234	2515
18714	8302	908	3583
18812	7864	369	2986
18815	7972	1145	5783
18911	6294	887	3277
18912	6515	594	4659
19012	4233	1122	3364
19019	6504	711	6613
19112	7505	939	5082
19114	7360	1399	3476
19214	5639	255	1628
19215	6393	1643	2116
19315	7254	260	2565
19317	7236	339	2840
19415	8145	284	4962
19416	7423	520	4496
19512	6466	259	3695
19514	7844	407	4982
19613	5720	145	1866

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200FF
STUDY NO: 200FF

SEX: FEMALE

Animal ID	HORIZONTAL ^a seconds ^d	CENTER ^b seconds	REARING ^c seconds
GROUP: 4-F:18 mg base/kg/day			
19617	0	12000	3112
19715	6373	338	2082
19716	5236	77	3147
19812	7369	638	5395
19814	6822	516	6054
19912	5824	157	1689
19915	7377	339	3257
20011	7518	384	3378
20012	6790	323	3166
MEAN	6640	727	3322
SD	1398.3	1660.8	1287.0
N	50	50	50

^aHorizontal = Active time in moving horizontally in the enclosure.

^bCenter = Total time spent in the center of the enclosure.

^cRearing = Total time in a rearing posture.

^dseconds = Tenths of seconds of activities.

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APPENDIX M
INDIVIDUAL F₁ GENERATION LEARNING AND MEMORY DATA

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

F₁ Generation: Learning and Memory Data

Dose Level (mg base/kg/day)	Male No.	Number Trials to Acquisition	Retention Latency	Female No.	Number Trials to Acquisition	Retention Latency
0	10901	2	180.0	10112	3	140.3
	10201	3	15.9	10813	3	180.0
	10302	2	180.0	10315	3	169.3
	10403	2	180.0	10412	2	171.1
	10502	4	131.3	10511	2	34.1
	10605	2	180.0	10614	3	68.5
	10701	2	180.0	10712	2	180.0
	10803	2	180.0	10813	2	18.6
	10901	2	180.0	10911	2	180.0
	11002	2	180.0	11012	2	110.7
	11902	2	180.0	11111	2	180.0
	11205	2	180.0	11212	2	180.0
	11805	2	180.0	11315	2	37.1
	11406	4	180.0	11012	5	13.7
	10502	2	27.5	11511	3	180.0
	11601	2	180.0	11611	2	180.0
	11703	2	180.0	11711	2	35.6
	11805	2	180.0	11012	4	180.0
	11902	2	30.2	11511	2	180.0
	12002	4	180.0	12012	3	159.1
	12104	2	180.0	12113	2	24.6
	10803	4	180.0	12211	3	180.0
	12303	3	180.0	12312	2	37.0
	12402	3	180.0	12411	3	180.0
	12501	3	180.0	12511	3	111.7

Number of Trials to Acquisition = The animal was allowed to cross from the dark to the illuminated chamber of the enclosure. If the animal crossed, it received a negative reinforcement and was returned to the illuminated chamber. The animal had 10 opportunities (i.e., trials) to demonstrate that it had "learned" not to cross to the dark chamber (i.e., remained in the illuminated chamber for 180 seconds).

Retention Latency = One week after the acquisition test, the animal was given one opportunity to demonstrate retention of the acquired behavior (i.e., not crossing from the illuminated to the dark chamber). The number of seconds the animal remained on the illuminated side (i.e., demonstrated "memory") was recorded. The test ended when the animal crossed from the illuminated to the dark chamber or at 180 seconds.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT STUDY OF WR238605 SUCCINATE IN RATS

F₁ Generation: Learning and Memory Data

Dose Level (mg base/kg/day)	Male No.	Number Trials to Acquisition	Retention Latency	Female No.	Number Trials to Acquisition	Retention Latency
2	12604	2	180.0	12911	2	180.0
	12705	2	180.0	12715	2	46.4
	12803	2	180.0	12813	2	180.0
	12905	2	96.1	12911	3	180.0
	13007	2	180.0	14911	2	180.0
	13101	2	180.0	13113	3	180.0
	13202	2	180.0	14212	4	180.0
	13301	2	180.0	13315	2	155.8
	13301	2	63.8	13912	2	180.0
	13503	3	180.0	13512	3	17.8
	13601	2	52.1	13912	3	180.0
	13705	3	180.0	13711	2	180.0
	13802	2	42.9	14511	3	15.3
	13902	3	180.0	13912	3	180.0
	14001	3	42.9	14212	2	28.4
	14104	2	180.0	14212	2	22.1
	14201	3	180.0	14212	2	180.0
	14302	2	180.0	14212	3	180.0
	14403	3	102.0	14412	3	51.5
	14502	3	102.8	14511	2	180.0
	14601	3	102.0	14511	2	24.7
	14704	2	180.0	14212	2	180.0
	14803	2	180.0	14811	3	180.0
	14901*	-	-	14913	2	180.0
	15001	2	84.2	15011	3	69.4

*Male No. 14901 did not cross from the illuminated to the dark side on the first trial. The animal was retested, with the same result. Thus, this animal was not considered to have had the opportunity to demonstrate acquisition and could not be tested for retention.

Number of Trials to Acquisition = The animals was allowed to cross from the dark to the illuminated chamber of the enclosure. If the animal crossed, it received a negative reinforcement and was returned to the illuminated chamber. The animal had 10 opportunities (i.e., trials) to demonstrate that it had "learned" not to cross to the dark chamber (i.e., remained in the illuminated chamber for 180 seconds).

Retention Latency = One week after the acquisition test, the animal was given one opportunity to demonstrate retention of the acquired behavior (i.e., not crossing from the illuminated to the dark chamber). The number of seconds the animal remained on the illuminated side (i.e., demonstrated "memory") was recorded. The test ended when the animal crossed from the illuminated to the dark chamber or at 180 seconds.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

F₁ Generation: Learning and Memory Data

Dose Level (mg base/kg/day)	Male No.	Number Trials to Acquisition	Retention Latency	Female No.	Number Trials to Acquisition	Retention Latency
6	15101 ^a	-	-	15112	2	96.0
	16003	2	45.5	16011	3	158.9
	15302	2	180.0	15313	2	38.7
	15402	2	180.0	15412	3	180.0
	15504	2	180.0	15513	2	33.0
	16801	2	180.0	16011	2	59.7
	15701	2	180.0	15712	2	37.5
	15804	2	97.3	15313	2	180.0
	159-- ^b	-	-	159-- ^b	2	-
	16003	2	180.0	16011	3	180.0
	16801	2	22.7	16113	3	180.0
	16202	2	180.0	16211	2	102.4
	16801	2	180.0	16011	2	59.4
	16404	3	180.0	15412	2	20.5
	15402	3	180.0	16513	4	56.3
	16601	3	180.0	16513	2	90.4
	16702	3	180.0	16011	2	33.0
	16801	2	26.8	16113	4	100.0
	16801	4	180.0	16011	4	33.0
	17004	4	180.0	17016	4	150.9
	17004	2	180.0	17111	2	50.4
	17203	5	180.0	17212	3	102.4
	17303	5	180.0	17311	2	28.2
	17401	2	135.0	17411	2	180.0
	17504	3	24.2	17513	5	24.7

^aMale No. 15101 did not cross from the illuminated to the dark side on the first trial. The animal was retested, with the same result. Thus, this animal was not considered to have had the opportunity to demonstrate acquisition and could not be tested for retention.

^bThere were no animals for litter No. 159 since F₀ dam No. 159 was not pregnant.

Number of Trials to Acquisition = The animal was allowed to cross from the dark to the illuminated chamber of the enclosure. If the animal crossed, it received a negative reinforcement and was returned to the illuminated chamber. The animal had 10 opportunities (i.e., trials) to demonstrate that it had "learned" not to cross to the dark chamber (i.e., remained in the illuminated chamber for 180 seconds).

Retention Latency = One week after the acquisition test, the animal was given one opportunity to demonstrate retention of the acquired behavior (i.e., not crossing from the illuminated to the dark chamber). The number of seconds the animal remained on the illuminated side (i.e., demonstrated "memory") was recorded. The test ended when the animal crossed from the illuminated to the dark chamber or at 180 seconds.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

F₁ Generation: Learning and Memory Data

Dose Level (mg base/kg/day)	Male No.	Number Trials to Acquisition	Retention Latency	Female No.	Number Trials to Acquisition	Retention Latency
18	17602	2	180.0	17614	2	46.0
	17703	2	132.4	17712	2	38.2
	17802	3	180.0	17614	3	180.0
	17902	2	45.1	18411	2	180.0
	18001	2	180.0	18213	2	46.0
	18103	2	180.0	18911	3	180.0
	18203	2	180.0	18213	2	117.0
	18301	2	180.0	19315	2	180.0
	18405	2	55.4	18411	2	124.2
	18802	3	180.0	18511	2	180.0
	18601	2	43.8	18511	2	48.3
	18703	2	180.0	18712	2	180.0
	18802	3	49.1	18812	3	180.0
	18904	3	7.2	18911	3	180.0
	19001	3	180.0	18911	3	13.2
	19102	2	180.0	18812	3	73.6
	19201	2	180.0	18213	3	180.0
	19304	2	180.0	19315	2	180.0
	19301	2	180.0	19315	2	48.3
	18802	2	39.1	18911	3	144.8
	19602	2	180.0	19613	2	180.0
	19702	2	34.3	19715	2	180.0
	19802	3	180.0	19812	3	113.1
	19901	2	25.7	19912	2	180.0
	20005	2	180.0	20011	2	180.0

Number of Trials to Acquisition = The animal was allowed to cross from the dark to the illuminated chamber of the enclosure. If the animal crossed, it received a negative reinforcement and was returned to the illuminated chamber. The animal had 10 opportunities (i.e., trials) to demonstrate that it had "learned" not to cross to the dark chamber (i.e., remained in the illuminated chamber for 180 seconds).

Retention Latency = One week after the acquisition test, the animal was given one opportunity to demonstrate retention of the acquired behavior (i.e., not crossing from the illuminated to the dark chamber). The number of seconds the animal remained on the illuminated side (i.e., demonstrated "memory") was recorded. The test ended when the animal crossed from the illuminated to the dark chamber or at 180 seconds.

DEAST

APPENDIX N

INDIVIDUAL F₁ GENERATION FEMALE REPRODUCTIVE DATA

- Individual Reproductive Indices
- Individual Gestation Duration
- Individual Number of F₂ Generation Viable Pups

Note: Unless stated otherwise, the notation "(--)" - Data Unavailable" indicates an animal not selected for postweaning assessment

ORAL PRENATAL AND POSTNATAL DEVELOPMENT STUDY OF WR238605 SUCCINATE IN RATS

F₁ Generation: Individual Reproductive Indices

DRAFT

Dose Level (mg base/kg/day)	F ₁ Female	Evidence of Mating	No. F ₂ Viable Pups	No. F ₂ Stillborn	Gross Observations ^a
0	10113	SP+	14	0	N
	10217	SP+	19	0	HT (2); all others N
	10318	SP+	14	0	N
	10413	SP+	15	0	N
	10513	SP+/NP	-	-	-
	10616	SP+	15	0	N
	10713	SP+	14	0	N
	10815	SP+	16	0	HT (1); all others N
	10911	SP+	15	0	N
	11015	SP+	16	0	N
	11117	SP+	16	0	N
	11213	SP+	16	0	N
	11316	SP+	17	1	HT (1); all others N
	11414	SP+	17	0	N
	11519	SP+	14	0	HT (1); ↓A (1); all others N
	11612	SP+	15	1	HT (2); all others N
	11712	SP+	13	0	HT (1); all others N
	11814	SP+	14	0	N
	11915	SP+/NP	-	-	-
	12013	SP-/P	16	2	HT (1); all others N
	12114	SP+	11	0	N
	12213	SP+	18	0	HT (4); all others N
	12313	SP+	15	0	HT (1); all others N
	12413	SP+/NP	-	-	-
	12519	SP+	18	1	HT (3); all others N

^aNumber in parenthesis = Number affected pups

SP+ = Sperm positive (i.e., sperm observed in the vaginal washing)

SP- = Sperm negative (i.e., sperm not observed in the vaginal washing on any cohabitation day)

NP = Not pregnant

P = Palpated pregnant

N = Normal

HT = Hematoma

↓A = Decreased activity

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

F₁ Generation: Individual Reproductive Indices

Dose Level (mg base/kg/day)	F ₁ Female	Evidence of Mating	No. F ₂ Viable Pups	No. F ₂ Stillborn	Gross Observations ^a
2	12612	SP+	17	0	N
	12716	SP+	16	0	HT (2); all others N
	12815	SP+	18	0	N
	12912	SP+/NP	-	-	-
	13013	SP+	15	0	N
	13114	SP+	17	0	Tail Cut (1); all others N
	13213	SP+	15	0	HT (1); all others N
	13317	SP+	14	0	N
	13414	SP+	17	0	N
	13515	SP-/P	19	0	HT (1); all others N
	13614	SP+	15	0	HT (3); all others N
	13713	SP+	15	0	HT (1); all others N
	13815	SP+	18	0	HT (1); all others N
	13913	SP+	14	1	HT (3); all others N; rachioschisis (stillborn)
	14014	SP+	16	0	HT (3); all others N
	14112	SP+	10	0	HT (4); all others N
	14213	SP-/P	13	0	N
	14315	SP+	16	0	N
	14412	SP+	15	0	N
	14514	SP+	16	0	N
	14615	SP+	11	2	N
	14714	SP+	15	0	N
	14812	SP+	10	0	N
	14916	SP+	16	2	HT (1); all others N
	15013	SP+	16	0	N

^aNumber in parenthesis = Number affected pups

SP+= Sperm positive (i.e., sperm observed in the vaginal washing)

SP- = Sperm negative (i.e., sperm not observed in the vaginal washing on any cohabitation day)

NP = Not pregnant

P = Palpated pregnant

N = Normal

HT = Hematoma

JA = Decreased activity

ORAL PRENATAL AND POSTNATAL DEVELOPMENT STUDY OF WR238605 SUCCINATE IN RATS

F₁ Generation: Individual Reproductive Indices

DRAFT

Dose Level (mg base/kg/day)	F ₁ Female	Evidence of Mating	No. F ₂ Viable Pups	No. F ₂ Stillborn	Gross Observations ^a
6	15115	SP-/P	13	0	N
	15213	SP+	17	0	HT (1); all others N
	15314	SP+	15	1	N
	15416	SP+	15	0	HT (3); all others N
	15518	SP+	15	0	N
	15617	SP+	18	0	HT (1); all others N
	15714	SP+	17	0	HT (1); all others N
	15816	SP+	16	0	HT (5); all others N
	159-- ^b	-	-	-	-
	16015	SP+	13	0	HT (1); ↓A/Gasping/Pale (1); all others N
	16114	SP+	12	0	N
	16216	SP+	16	0	HT (1); all others N
	16313	SP+	15	0	HT (3); all others N
	16413	SP+	6	0	N
	16514	SP+	13	0	HT (2); all others N
	16614	SP+	15	0	HT (4); ↓A, Pale (1); all others N
	16714	SP+	19	0	HT (2); all others N
	16814	SP+	14	0	N
	16913	SP+	17	0	N
	17018	SP+	16	1	HT (4); all others N
	17115	SP+	16	0	HT (1); all others N
	17215	SP+	15	0	HT (2); all others N
	17312	SP+	17	0	HT (1); all others N
	17413	SP+	5	0	N
	17516	SP+	16	0	HT (1); all others N

^aNumber in parenthesis = Number affected pups^bThere was no mating pair for litter No. 159 since F₀ Dam No. 159 was not pregnant

SP+= Sperm positive (i.e., sperm observed in the vaginal washing)

SP- = Sperm negative (i.e., sperm not observed in the vaginal washing on any cohabitation day)

NP = Not pregnant

P = Palpated pregnant

N = Normal

HT = Hematoma

↓A = Decreased activity

ORAL PRENATAL AND POSTNATAL DEVELOPMENT STUDY OF WR238605 SUCCINATE IN RATS

F₁ Generation: Individual Reproductive Indices

DRAFT

Dose Level (mg base/kg/day)	F ₁ Female	Evidence of Mating	No. F ₂ Viable Pups	No. F ₂ Stillborn	Gross Observations ^a
18	17616	SP+/NP	-	-	-
	17713	SP+	14	0	HT/raised white area on left flank (1); small (1); all others N
	17816	SP+	8	1	HT (1); all others N
	17912	SP+	14	1	Stillborn anencephalic; all others N
	18014	SP+	17	1	N
	18116	SP-/P	13	0	HT (1); all others N
	18214	SP+	15	1	N
	18317	SP+	16	0	N
	18416	SP+	15	2	N
	18515	SP+	16	0	N
	18613	SP+	16	0	HT (1); all others N
	18714	SP+	17	0	N
	18815	SP+/NP	-	-	-
	18912	SP+	0	0	2 resorbed fetuses
	19019	SP+	11	1	HT (1); all others N
	19114	SP+	16	0	HT (1); all others N
	19215	SP+	14	0	N
	19317	SP+	17	0	HT (6); all others N
	19416	SP+	13	0	N
	19514	SP+	12	1	N
	19617	SP+	16	0	HT (3); all others N
	19716	SP+	15	0	HT (1); all others N
	19814	SP+/NP	-	-	-
	19915	SP+	14	0	HT (2); all others N
	20012	SP+	15	0	HT (4); all others N

^aNumber in parenthesis = Number affected pups

SP+= Sperm positive (i.e., sperm observed in the vaginal washing)

SP- = Sperm negative (i.e., sperm not observed in the vaginal washing on any cohabitation day)

NP = Not pregnant

P = Palpated pregnant

N = Normal

HT = Hematoma

JA = Decreased activity

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID DUR^a
 days

GROUP: 1-F:0 mg base/kg/day

10112	--
10113	22.00
10115	--
10117	--
10214	--
10215	--
10217	21.00
10218	--
10312	--
10313	--
10315	--
10318	22.00
10411	--
10412	--
10413	21.00
10415	--
10511	--
10512	--
10513 ^b	--
10611	--
10614	--
10615	--
10616	21.00
10711	--
10712	--
10713	22.00
10714	--
10811	--
10813	--
10815	21.00
10816	--
10911	23.00
11011	--
11012	--
11014	--
11015	21.00
11111	--
11113	--
11116	--

(--) - Data Unavailable

^aDUR = Gestation Duration.

^bThis animal was sperm positive (i.e., sperm was observed in the vaginal washing) but was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID DUR^a
 days

GROUP: 1-F:0 mg base/kg/day

11117	21.00
11211	--
11212	--
11213	21.00
11311	--
11312	--
11315	--
11316	21.00
11411	--
11412	--
11413	--
11414	21.00
11511	--
11513	--
11514	--
11519	21.00
11611	--
11612	22.00
11616	--
11617	--
11711	--
11712	21.00
11811	--
11812	--
11813	--
11814	22.00
11911	--
11913	--
11914 ^b	--
11915 ^b	--
12012	--
12013 ^c	--
12015	--
12016	--
12111	--
12113	--
12114	22.00
12117	--
12211	--

(--) - Data Unavailable

^aDUR = Gestation Duration.

^bThis animal was sperm positive (i.e., sperm was observed in the vaginal washing) but was not pregnant.

^cThis animal was sperm negative but subsequently palpated pregnant and delivered a viable litter. The gestation duration could not be determined since the GD0 date was unknown.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

00000

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	DUR ^a days
GROUP: 1-F:0 mg base/kg/day	
12212	--
12213	21.00
12311	--
12312	--
12313	21.00
12314	--
12411	--
12413 ^b	--
12415	--
12416	--
12511	--
12518	--
12519	21.00
12520	--
MEAN	21.38
SD	0.590
N	21

(--) - Data Unavailable

^aDUR = Gestation Duration.

^bThis animal was sperm positive (i.e., sperm was observed in the vaginal washing) but was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

DEAST

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID DUR^a
days

GROUP: 2-F:2 mg base/kg/day

12611	--
12612	22.00
12711	--
12712	--
12715	--
12716	22.00
12811	--
12813	--
12814	--
12815	21.00
12911	--
12912 ^b	--
12913	--
13011	--
13012	--
13013	21.00
13014	--
13113	--
13114	22.00
13115	--
13119	--
13211	--
13212	--
13213	22.00
13311	--
13315	--
13317	22.00
13318	--
13412	--
13413	--
13414	23.00
13417	--
13512	--
13513	--
13514	--
13515 ^c	--
13612	--
13614	21.00
13615	--

(--) - Data Unavailable

^aDUR = Gestation Duration.

^bThis animal was sperm positive (i.e., sperm was observed in the vaginal washing) but was not pregnant.

^cThis animal was sperm negative but subsequently palpated pregnant and delivered a viable litter. The gestation duration could not be determined since the GD0 date was unknown.

DRAFT

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	DUR ^a days
-----------	--------------------------

GROUP: 2-F:2 mg base/kg/day

13616	--
13711	--
13713	21.00
13811	--
13812	--
13814	--
13815	22.00
13911	--
13912	--
13913	21.00
13916	--
14011	--
14012	--
14014	21.00
14015	--
14111	--
14112	22.00
14211	--
14212	--
14213 ^b	--
14314	--
14315	22.00
14316	--
14317	--
14412	22.00
14414	--
14416	--
14417	--
14511	--
14512	--
14514	22.00
14516	--
14612	--
14613	--
14614	--
14615	22.00
14712	--
14713	--
14714	22.00

(--) - Data Unavailable

^aDUR = Gestation Duration.

^bThis animal was sperm negative but subsequently palpated pregnant and delivered a viable litter. The gestation duration could not be determined since the GD0 date was unknown.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID DUR^a
 days

GROUP: 2-F:2 mg base/kg/day

14715	--
14811	--
14812	22.00
14813	--
14816	--
14912	--
14913	--
14914	--
14916	22.00
15011	--
15013	22.00
15014	--
15015	--

MEAN	21.77
SD	0.528
N	22

(--) - Data Unavailable

^aDUR = Gestation Duration.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	DUR ^a days
-----------	--------------------------

GROUP: 3-F:6 mg base/kg/day

15111	--
15112	--
15114	--
15115 ^b	--
15211	--
15212	--
15213	21.00
15215	--
15311	--
15313	--
15314	22.00
15315	--
15412	--
15413	--
15415	--
15416	21.00
15511	--
15513	--
15515	--
15518	21.00
15611	--
15614	--
15615	--
15617	23.00
15712	--
15714	22.00
15716	--
15717	--
15812	--
15813	--
15814	--
15816	21.00
16011	--
16013	--
16014	--
16015	22.00
16111	--
16112	--
16113	--

(--) - Data Unavailable

^aDUR = Gestation Duration.

^bThis animal was sperm negative but subsequently palpated pregnant and delivered a viable litter. The gestation duration could not be determined since the GD0 date was unknown.

Note: There was no mating pair for litter No. 159 since F₀ dam No. 159 was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID DUR^a
 days

GROUP: 3-F:6 mg base/kg/day

16114	22.00
16211	--
16214	--
16215	--
16216	22.00
16311	--
16313	21.00
16314	--
16316	--
16412	--
16413	22.00
16511	--
16512	--
16513	--
16514	22.00
16613	--
16614	21.00
16615	--
16617	--
16711	--
16712	--
16713	--
16714	21.00
16811	--
16812	--
16813	--
16814	21.00
16911	--
16912	--
16913	21.00
16914	--
17014	--
17015	--
17016	--
17018	21.00
17111	--
17112	--
17114	--
17115	21.00

(--) - Data Unavailable

^aDUR = Gestation Duration.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	DUR ^a days
-----------	--------------------------

GROUP: 3-F:6 mg base/kg/day

17212	--
17214	--
17215	22.00
17216	--
17311	--
17312	21.00
17411	--
17412	--
17413	22.00
17414	--
17511	--
17513	--
17515	--
17516	22.00

MEAN	21.52
SD	0.593
N	23

(--) - Data Unavailable

^aDUR = Gestation Duration.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID DUR^a
 days

GROUP: 4-F:18 mg base/kg/day

17611	--
17612	--
17614	--
17616 ^b	--
17712	--
17713	21.00
17715	--
17718	--
17811	--
17815	--
17816	21.00
17818	--
17911	--
17912	21.00
17913	--
18012	--
18013	--
18014	22.00
18016	--
18112	--
18114	--
18115	--
18116 ^c	--
18213	--
18214	22.00
18216	--
18218	--
18312	--
18315	--
18316	--
18317	22.00
18411	--
18412	--
18414	--
18416	22.00
18511	--
18512	--
18515	22.00
18516	--

(--) - Data Unavailable

^aDUR = Gestation Duration.

^bThis animal was sperm positive (i.e., sperm was observed in the vaginal washing) but was not pregnant.

^cThis animal was sperm negative but subsequently palpated pregnant and delivered a viable litter. The gestation duration could not be determined since the GD0 date was unknown.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID DUR^a
 days

GROUP: 4-F:18 mg base/kg/day

18611	--
18613	21.00
18614	--
18615	--
18712	--
18713	--
18714	22.00
18715	--
18811	--
18812	--
18813	--
18815 ^b	--
18911	--
18912 ^c	--
18914	--
19012	--
19018	--
19019	21.00
19020	--
19111	--
19112	--
19113	--
19114	21.00
19212	--
19213	--
19214	--
19215	21.00
19311	--
19315	--
19316	--
19317	21.00
19413	--
19415	--
19416	21.00
19417	--
19511	--
19512	--
19513	--
19514	22.00

(--) - Data Unavailable

^aDUR = Gestation Duration.

^bThis animal was sperm positive (i.e., sperm was observed in the vaginal washing) but was not pregnant.

^cThis animal was sperm positive but had two resorbed fetuses. The gestation duration could not be determined since a delivery date was unknown.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200
STUDY NO: 200

SEX: FEMALE

Animal ID	DUR ^a days
-----------	--------------------------

GROUP: 4-F:18 mg base/kg/day

19611	--
19613	--
19615	--
19617	21.00
19712	--
19714	--
19715	--
19716	21.00
19811	--
19812	--
19813	--
19814 ^b	--
19911	--
19912	--
19914	--
19915	22.00
20011	--
20012	21.00
20013	--

MEAN	21.40
SD	0.503
N	20

(--) - Data Unavailable

^aDUR = Gestation Duration.

^bThis animal was sperm positive (i.e., sperm was observed in the vaginal washing) but was not pregnant.

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200F2
STUDY NO: 200F2

SEX: FEMALE

Animal ID	Viable pups
-----------	----------------

GROUP: 1-F

10113	14.0
10217	19.0
10318	14.0
10413	15.0
10616	15.0
10713	14.0
10815	16.0
10911	15.0
11015	16.0
11117	16.0
11213	16.0
11316	17.0
11414	17.0
11519	14.0
11612	15.0
11712	13.0
11814	14.0
12013	16.0
12114	11.0
12213	18.0
12313	15.0
12519	18.0

MEAN	15.4
SD	1.81
N	22

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200F2
STUDY NO: 200F2

SEX: FEMALE

Animal ID	VIABLE pups
-----------	----------------

GROUP: 2-F

12612	17.0
12716	16.0
12815	18.0
13013	15.0
13114	17.0
13213	15.0
13317	14.0
13414	17.0
13515	19.0
13614	15.0
13713	15.0
13815	18.0
13913	14.0
14014	16.0
14112	10.0
14213	13.0
14315	16.0
14412	15.0
14514	16.0
14615	11.0
14714	15.0
14812	10.0
14916	16.0
15013	16.0

MEAN	15.2
SD	2.32
N	24

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200F2
STUDY NO: 200F2

SEX: FEMALE

Animal ID	VIABLE pups
-----------	----------------

GROUP: 3-F

15115	13.0
15213	17.0
15314	16.0
15416	15.0
15518	15.0
15617	18.0
15714	17.0
15816	16.0
16015	13.0
16114	12.0
16216	16.0
16313	15.0
16413	6.0
16514	13.0
16614	15.0
16714	19.0
16814	14.0
16913	17.0
17018	16.0
17115	16.0
17215	15.0
17312	17.0
17413	5.0
17516	16.0

MEAN	14.7
SD	3.28
N	24

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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INDIVIDUAL ANIMAL REPORT BY GROUP

STUDY ID: 200F2
STUDY NO: 200F2

SEX: FEMALE

Animal ID VIABLE
 pups

GROUP: 4-F

17713	14.0
17816	8.0
17912	14.0
18014	17.0
18116	13.0
18214	15.0
18317	16.0
18416	15.0
18515	16.0
18613	16.0
18714	17.0
19019	11.0
19114	16.0
19215	14.0
19317	17.0
19416	13.0
19514	12.0
19617	16.0
19716	15.0
19915	14.0
20012	15.0

MEAN	14.5
SD	2.20
N	21

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APPENDIX 0
PROTOCOL AND AMENDMENTS

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

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1.0 PURPOSE OF THE STUDY:

The purpose of this study is to determine and evaluate the toxic potential of the test article on the pregnant/lactating female rat (F₀ generation) and the development of their offspring (F₁ generation) consequent to exposure from implantation through weaning. WR238605 Succinate is being developed as an antimalarial agent. The scope of the study will encompass evaluation of potential adverse effects on parturition and lactation of the F₀ generation and the growth, development, behavior, and reproductive capabilities of the F₁ generation. The protocol conforms with the FDA *Guideline on Detection of Toxicity to Reproduction for Medicinal Products* (1994), which was prepared under the auspices of the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH). The protocol for this study was approved by the UIC Animal Care Committee (Appendix 1).

2.0 SPONSOR:

- 2.1 Name: U.S. Army Medical Materiel
Development Activity
- 2.2 Address: Fort Detrick
Frederick, MD 21702-5009
- 2.3 Representative: George J. Schieferstein, Ph.D.

3.0 TESTING FACILITY:

- 3.1 Name: Toxicology Research Laboratory (TRL)
- 3.2 Address: University of Illinois at Chicago (UIC)
Department of Pharmacology
1940 W. Taylor St.
Chicago, IL 60612-7353
- 3.3 Study Director: Debra L. Kirchner, Ph.D., D.A.B.T.

4.0 DATES:

- 4.1 Proposed Initiation of Dosing (Gestation Day 6): 4/29/96
- 4.2 Proposed Completion of In-Life Phase: 9/27/96
- 4.3 Proposed Study Completion Date
(Draft Final Report): 12/27/96

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5.0 TEST ARTICLE

- 5.1 Name or Code No: WR238605 Succinate (mole fraction = 0.8)
8-[4-Amino-1-methylbutyl)amino]-2,6-dimethoxy-4
methyl-5-(3-trifluoromethyl phenoxy)quinoline succinate
Bottle No. BM12562
CAS No. 106635-81-8
- 5.2 TRL Chemical No: 0720614
- 5.3 Physical Description: Pale yellow powder
- 5.4 Storage Conditions to Maintain Stability:
- 5.4.1 Temperature: 0 - 4°C.
- 5.4.2 Humidity: Ambient conditions.
- 5.4.3 Light: Protect from light; amber bottle or silver foil covering.
- 5.4.4 Special Requirements: None.
- 5.5 Special Handling Procedures: Standard safety precautions will be followed including gloves, eye protection, mask, and lab coats.
- 5.6 Log of Test Article: The amount, date, identity of person(s) removing aliquots and the purpose for which each aliquot of the test article was removed from the batch will be documented. At termination of the study, unused test article may be returned to the Sponsor.
- 5.7 Retention Sample: A 1 g retention sample has previously been retained under the specified storage conditions.

6.0 PERSONNEL:

Principal Investigator	Barry S. Levine, D.Sc., D.A.B.T.
Study Director	Debra L. Kirchner, Ph.D., D.A.B.T.
Clinical Veterinarian	James Artwohl, D.V.M., M.S., D.A.C.L.A.M.
Tox. Lab Supervisor	Soudabeh Soura, B.S.
Lead Technician	Nancy Dinger, B.S.
Chemistry Specialist	Thomas Tolhurst, B.S.
Quality Assurance	Ronald C. Schoenbeck

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7.0 TEST SYSTEM:

- 7.1 Species: Rat
- 7.2 Strain: CD[®] (Virus Antibody Free)
- 7.3 Sex(s)/Number: 100 time-mated nulliparous females (gestation day 0 = day of vaginal plug detection) in two shipments with two successive gestation day 0 dates per shipment.
- 7.4 Age of Animals: 60 - 70 days old at randomization (assigned to study)
- 7.5 Body Weight: Approximately 200 - 250 g at randomization (assigned to study)
- 7.6 Source of Animals: Charles River Breeding Laboratories, Inc. The specific source will be documented in the raw data.
- 7.7 Justification for Selection of Test System: The CD[®] rat was selected as the animal model for this study because: (1) the U.S. Food and Drug Administration *Guideline on Detection of Toxicity to Reproduction for Medicinal Products* (1994) requires a rodent species, preferably rats, for preclinical reproductive testing of drugs; (2) this species/strain has a proven sensitivity to a variety of agents and therefore provides a suitable animal model for testing chemicals and drugs for human risk assessment; (3) reliable scientific methods currently exist for performing rat reproduction studies; (4) historical data and experience exist; (5) the CD[®] rat has been used extensively for reproduction testing; and (6) it was specified by the Sponsor.
- 7.8 Procedure for Unique Identification of F₀ Generation Test System: Each F₀ generation female will be given a facility-unique animal number (ear tag) by the Supplier and a separate study-unique number as a subcutaneously implanted microchip upon arrival at UIC. This number will also appear on a cage card visible on the front of each cage. The cage card will additionally contain the study number, test article identification, treatment group number, sex, and dose level. Cage cards will be color-coded as a function of treatment group. Raw data records and specimens will also be identified by the unique test animal number.
- 7.9 Housing: The F₀, F₁, and F₂ animals will be housed in an AAALAC-accredited facility. Animals will be singly housed (except during portions of the postnatal period as described in the protocol) in polycarbonate cages with Anderson-bed-a-cob bedding (Heinold, Kankakee, Illinois) in a temperature (65-78°F) and humidity (30-70%) controlled room with a 14 hour light/10 hour dark cycle. The cage size, 840 cm² area and 20 cm height, is adequate to house rats at the upper weight range as described in the *Guide for the Care and Use of Laboratory Animals*, DHHS (NIH) No. 86.23. All animals will be routinely transferred to clean cages with fresh bedding once weekly.
- 7.10 Quarantine Procedure: The F₀ generation animals will be quarantined for at least 3 days, from receipt until dosing is initiated on day 6 of gestation. During the quarantine period, the animals will be observed daily for signs of illness, and all unusual observations will be documented and reported to the Study Director or Clinical Veterinarian. Animals will be examined during quarantine and approved for use by the Clinical Veterinarian prior

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to being placed on test. Unless deemed unhealthy (based on general clinical observations), all animals will be available for use in the study. If a selected animal appears unhealthy prior to initiation of treatment, it will be replaced by a healthy animal prior to initiation of treatment under the direction of the Study Director. Quarantine release will be documented on the Clinical Veterinarian Log by the Clinical Veterinarian prior to study initiation.

- 7.11 Food: Certified Rodent Chow No. 5002 (PMI Feeds, Inc., St. Louis, MO) will be provided *ad libitum* from arrival until termination.
- 7.12 Water: Tap water from an automatic watering system in which the room distribution lines are flushed daily will be provided *ad libitum* from arrival until termination. The water is not treated with additional chlorine or HCl.
- 7.13 There are no known contaminants in the feed or water which are expected to influence the study. A copy of the feed certification will be kept with the study records. The results of bimonthly comprehensive chemical analyses of Chicago water are documented in files maintained by Quality Assurance.
- 7.14 It is not known if the animals will experience pain or distress during the study. Analgesic or anesthetic agents will confound the ability to determine the toxic potential of the test article, and therefore will not be used. If an animal is in severe pain or distress, following consultation with the veterinary staff, it will be euthanized in accordance with standard operating procedures.

8.0 EXPERIMENTAL DESIGN:

8.1 Treatment Groups:

<u>Group</u>	<u>No. of F₀ Females</u>	<u>Treatment</u>	<u>Dose Level (mg base/kg/day)</u>	<u>Dose Conc. (mg base/ml)</u>	<u>Dose Volume (ml/kg/day)</u>
1	25	Vehicle	0	0	5
2	25	WR238605	2	0.4	5
3	25	WR238605	6	1.2	5
4	25	WR238605	18	3.6	5

*Presumed pregnant

The number of F₀ animals, 25/sex/dose level, is necessary to result in 16 - 20 litters/group for rodents as recommended in the *ICH Harmonized Tripartite Guideline* (1993).

Test article dose levels are selected on the basis of a developmental toxicity study in female rats (UIC/TRL Study No. 154). In that study, doses of 0, 3, 10, or 30 mg base/kg/day were administered by gavage to presumed pregnant rats during gestation days 6 - 15. In the absence of developmental toxicity, maternal toxicity was observed at 30

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mg base/kg/day as exemplified by significant decreases in body weight, total body weight gain and food consumption noted throughout the study; while marginal reductions in body weight and food consumption were noted at 10 mg base/kg/day during the dosing period.

- 8.2 Frequency and Route of Administration of Test Article: The test article will be given orally by gavage (oral dosing needle) to the F₀ generation from gestation day 6 through postnatal day 20. The drug will be administered at a dosing volume of 5 ml/kg/day. The control group will receive the vehicle (i.e., the control article) at the same dosing volume. The specific volume to be administered will be adjusted on the basis of the animal's most recent body weight.
- 8.3 Justification of Route(s): The oral route is a convenient and accepted procedure for administering a specific amount of a test article to each animal. It mimics potential human exposure conditions and is specified by the Sponsor.
- 8.4 Procedure to Control Bias during the Assignment of Animals to Treatment Groups: During the quarantine/pretest period, animals judged to be healthy and meeting acceptable body weight requirements (Section 7.5) will be assigned to the study using a randomization procedure on the basis of body weight. Each of the 4 gestation day 0 subsets will be separately randomized to result in 6 or 7 animals/group/day for a total of 25 animals/group. Animals not assigned to the study will be euthanized.
- 8.5 Control Article (Test Article Vehicle): 1% Methylcellulose/0.2% Tween 80 in deionized distilled water. Both chemicals will be obtained from Sigma Chemical Co. If another source is used, it will be identified in the raw data.
- 8.6 Test Article Dosage Form Preparation and Analyses: The neat drug has previously been identified by GC-MS, and will be analyzed for purity prior to and after completion of the dosing period. Dosage formulation calculations of the test article will be adjusted for test article purity and the mole fraction of the base. The control materials will be assumed to be 100% pure. The control article will be prepared at least weekly by placing the required amount of deionized distilled water in a beaker and then adding the required amount of Methylcellulose and volume of Tween 80, using its specific gravity of 1.08 (1.0 g of Methylcellulose and 0.2 g Tween 80 per 100 ml of deionized distilled water). One lot no. each of Methylcellulose and Tween 80 will be used. The mixture will be stirred until homogeneous and then refrigerated.

The test article dosing suspensions will be prepared weekly. Stability data from a previously conducted dog toxicity study by gastric intubation demonstrated that WR238605 Succinate suspensions were stable for at least 28 days under refrigeration (UIC/TRL Study No. 047). Homogeneity data also obtained from UIC/TRL Study No. 047 demonstrated that the test article suspensions are homogeneous (coefficients of variation for sampling in the top, middle and bottom of several test suspensions were typically less than 4%).

Each test article dosing suspension will be prepared individually by adding the appropriate amount of WR238605 Succinate with the required volume of the control article in a pre-calibrated beaker. The contents will be mixed with an Omni-Mixer homogenizer, for at least 5 minutes. All suspensions will be stored at 2 - 8°C. All suspensions will be

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allowed to warm to room temperature and stirred continuously before and during gavage administration. Samples of all dosing suspensions (including controls) prepared weekly will be analyzed prior to use, and only suspensions within 10% of their target concentration will be used. Weekly samples will also be analyzed for test article concentration after use. Tolerance of sample analysis after use will also be 10%, i.e., 10% of the "before use" assay value. If two or more consecutive analyses are outside of tolerance, a review of analytical chemistry procedures and personnel techniques will occur.

8.7 F₀ Generation Observations and Measurements:

- 8.7.1 Mortality Check: All animals will be observed twice daily, at least six hours apart for moribundity/mortality. Moribund animals will be euthanized and necropsied on that day.
- 8.7.2 Clinical Signs: All animals will be observed daily for clinical signs of toxicity approximately 1-2 hours after dosing.
- 8.7.3 Body Weights: Individual body weights will be recorded on gestation days 0 (by the supplier), at randomization, 6, 9, 12, 15, 18, and 20; and on postnatal days 0, 4, 7, 10, 14, 17, and 21.
- 8.7.4 Food Consumption: Individual food consumption will be measured during the following intervals: gestation days 6-9; 9-12; 12-15; 15-18; and 18-20.
- 8.7.5 Parturition and Lactation: F₀ dams will be observed at least twice daily for signs of parturition beginning on gestation day 18. Any signs of difficult or prolonged parturition will be recorded. The day parturition is observed will be designated postnatal day 0. The lactation period will be from postnatal day 0 to 21 during which time the dam and litter will remain together. Any abnormal nursing or nesting behaviors will be noted.
- 8.7.6 Euthanasia and Necropsy: The method of euthanasia for all F₀ generation animals will be CO₂ asphyxiation. Females that deliver will be euthanized and necropsied on postnatal day 21. If all of the pups of a litter die prior to postnatal day 21, the dam will be euthanized and necropsied on the day of litter loss. Females that fail to deliver will be euthanized and necropsied on presumed gestation day 25. Females which demonstrate dystocia (i.e., incomplete delivery) will be euthanized and necropsied on that day.

The F₀ animals will be grossly examined externally and internally. The thoracic, abdominal, and pelvic cavities will be opened and the viscera examined. Any abnormalities will be recorded. Organs/tissues with gross lesions will be preserved in 10% neutral buffered formalin for possible histopathologic examination. If any organs/tissues with gross lesions are retained from treated animals, corresponding organs/tissues from a control animal will be retained, when possible, for comparison. Upon issuance of the final report, the Sponsor will provide written directions regarding the disposition of tissues not examined histopathologically.

Any F₀ dams found dead or sacrificed prior to, during, or after the completion of delivery but prior to postnatal day 21 will be euthanized and grossly examined externally and internally. Any abnormalities will be recorded. Organs/tissues with gross lesions will be preserved in 10% neutral buffered formalin for possible histopathologic examination. Upon issuance of the final report, the Sponsor will provide written directions regarding the disposition of tissues not examined histopathologically. The uterus will be opened and the numbers of viable and nonviable fetuses, early and late resorptions, and/or implantation sites will be counted and recorded. Any viable fetuses will be euthanized via an intraperitoneal injection of 40% sodium pentobarbital (\approx 0.04 ml/fetus) and discarded. Uteri with no macroscopic evidence of implantations will be opened and placed in 10% aqueous ammonium sulfide solution for approximately 10 minutes for detection of early embryoletality or implantation.

8.8 F₁ Generation Identification and Standardization in the Prewaning Period:

8.8.1 Method of Individual Pup Identification: On postnatal day 0, each pup in the litter will be identified using toe clipping.

8.8.2 Standardization of Litter Sizes: On postnatal day 4, litters will be culled in order to equalize the burden on the dam for milk production and to diminish confounding effects on pup growth and development. When possible, the litters will be culled via a computer randomization procedure using random numbers to yield a maximum of 4 pups/sex/litter (i.e., a maximum of 8 pups/litter). All other pups will be euthanized and grossly examined externally (Section 8.14).

8.9 F₁ Generation Observations and Measurements:

8.9.1 Mortality Check: Twice daily from postnatal days 0 until study termination.

8.9.2 Clinical Signs: Postnatal days 0, 4, 7, 14, and 21, and weekly thereafter. Unless otherwise noted, all pups will be considered to have milk in the stomach on days 0 - 7 (easily identified through their translucent skin from postnatal days 0 - 4).

8.9.3 Body Weights: Postnatal days 0, 4 (precull), 7, 14, 21, and weekly thereafter until study termination.

8.9.4 Sex Determinations and Number of Viable Pups: Postnatal days 0, 4, 7, 14, and 21. The number of stillborn (postnatal day 0), dead, missing, or cannibalized pups will be recorded as noted. Stillborn pups will not be sexed.

8.10 F₁ Generation Prewaning Developmental Landmarks: Observed daily in all pups until present in accordance with the following schedule:

<u>Parameter</u>	<u>Begin Observation on Postnatal Day:</u>	<u>Observation Present on Postnatal Days:</u>
Surface Righting Reflex	1	2 - 3
Incisor Appearance	7	9 - 11
Eyes Open	10	13 - 16
Cliff Avoidance	15	16 - 20

D C A T T

- 8.11 F₁ Generation Selection and Identification of Animals for Postweaning Assessments: F₁ pups will be weaned on postnatal day 21 (F₀ females removed from cage, euthanized and necropsied). On postnatal day 21 or 22, a maximum of two animals/sex/litter, when possible, will be selected to remain on study. These two animals/sex will be, when possible, the same first two pups/sex that were randomly retained on postnatal day 4. All of the F₁ animals retained on postnatal day 21 or 22 will be assessed in a functional observational battery for weanling rats (Section 8.12.1), and for postweaning landmarks (Section 8.12.2) and motor activity in an open-field (Section 8.12.3). One animal/sex/litter will be randomly selected for assessment of learning and memory (Section 8.12.4) and the other animal/sex/litter will be used to assess fertility indices (Section 8.13). If a litter contains only one pup of one sex, that pup will be assigned to all postweaning evaluations. Animals not selected for postweaning assessments will be euthanized (Section 8.14). At the start of the F₁ fertility phase, all F₁ animals not selected for fertility assessment will be euthanized (Section 8.14).

At randomization on postnatal day 21 or 22, males and females will be separated. The selected F₁ animals will be given a study-unique number as a subcutaneously implanted microchip. A record will be maintained correlating the toe-mark ID with the study-unique ID for each animal. Animals within a litter may be gang-housed by sex until postnatal day 35 when they will be housed individually. The study-unique number(s) will also appear on a cage card visible on the front of each cage. The cage card will additionally contain the study number, test article identification, treatment group number, sex, and dose level. Cage cards will be color-coded as a function of treatment group. Raw data records and specimens will also be identified by the unique test animal number.

8.12 F₁ Generation Postweaning Assessments:

- 8.12.1 Functional Observational Battery (FOB): An FOB for weanling rats will be conducted on postnatal days 28 ± 2. The FOB will generally be conducted in the morning (typically before 1300) and will consist of the following observations and measures:

Homecage Observations
Activity/Reactivity in an Open Field
Neuromotor Development
Air Righting Reflex
Sensory Function
Auditory Function
Body Temperature

- 8.12.2 Postweaning Developmental Landmarks: Observed daily until present in accordance with the following schedule:

<u>Parameter:</u>	<u>Begin Observation on Postnatal Day:</u>	<u>Observation Present on Postnatal Days:</u>
Vaginal Opening (females)	28	32 - 40
Preputial Separation (males)	35	42 - 50

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8.12.3 Motor Activity in an Open Field: In order to assess general locomotor activity and patterns of exploratory behavior, the selected F₁ animals will be evaluated on postnatal days 42 ± 2 using the Flex-Field Activity System® (San Diego Instruments, San Diego, CA). The animals will be assessed one at a time in a clear acrylic 16" x 16" enclosure for a specified time interval. Photobeam disruptions will be used to quantitate (i.e., score) central and peripheral activity within the enclosure.

8.12.4 Evaluation of Learning and Memory: In order to assess acquisition of a behavior (i.e., learning) and retention of the new behavior (i.e., memory), the selected F₁ animals will be evaluated using the Gemini Avoidance System® (San Diego Instruments, San Diego, CA). The animals will be assessed one at a time in a light/dark enclosed chamber. This test assesses the animal's ability to avoid the preferred darkened chamber using negative reinforcement and will be conducted in two phases:

<u>Phase:</u>	<u>Postnatal Day:</u>
Acquisition (learning)	56 ± 2
Retention (memory)	63 ± 2

8.13 F₁ Generation Fertility Assessment:

8.13.1 Mating: Rats will be sexually mature (at least 10 weeks of age) at the initiation of mating. F₁ females selected as parental animals for the next generation will be continuously cohabitated with a single F₁ male from the same treatment group. Sibling matings will be avoided. The mating pair will be separated on gestation day 0 (defined as observation of a vaginal plug or the presence of sperm in the vaginal washing, conducted on a daily basis following cohabitation). The female will be returned to her individual cage.

Females that do not show evidence of mating after a total of 14 days of pairing will be separated from their mates and returned to their individual cages. Males will be retained until the completion of F₁ fertility assessment.

8.13.2 Parameters to be Measured: F₁ animals retained for fertility assessment will be observed twice daily for mortality/moribundity. Moribund animals will be euthanized and necropsied on that day (Section 8.14). Each female will be observed at least twice daily for signs of parturition beginning on gestation day 18. Any signs of difficult or prolonged parturition will be recorded. The day of parturition will be recorded. Females that fail to deliver will be euthanized and necropsied on gestation day 25 (i.e., 25 days after evidence of mating was detected). Females which demonstrate dystocia (i.e., incomplete delivery) will be euthanized and necropsied on that day. Females that do not display evidence of mating will be euthanized and necropsied 25 days after the last day of cohabitation.

On the day parturition is observed, the numbers of viable, stillborn, and nonviable F₂ pups will be recorded. Any external abnormalities will be recorded. Viable F₂ pups will be euthanized via an intraperitoneal injection of 40% sodium pentobarbital (≈ 0.04 ml/fetus) and discarded. Stillborn and nonviable F₂ pups will also be discarded.

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- 8.13.3 Completion of Fertility Assessment: Mating and fertility indices (Section 9.0) will be reviewed by the Study Director and Sponsor's Representative as soon as possible. If apparent adverse effects are noted, the Study Director and Sponsor's Representative will decide if any additional evaluations are required. If no apparent test article-related changes are observed, the F₁ animals used during the fertility phase will be euthanized.
- 8.14 F₁ Generation Euthanasia and Necropsy: The method of euthanasia for F₁ generation pups between postnatal days 0 - 20 days old will be via an intraperitoneal injection of 40% sodium pentobarbital (≈ 100 mg/kg). The method of euthanasia for F₁ generation animals postnatal day 21 and older will be CO₂ asphyxiation. All F₁ animals will be grossly examined externally, and any abnormalities will be recorded. Tissues with gross lesions will be preserved in 10% neutral buffered formalin for possible histopathologic examination. If any tissues with gross lesions are retained from treated animals, corresponding tissues from a control animal will be retained, when possible, for comparison. Upon issuance of the final report, the Sponsor will provide written directions regarding the disposition of tissues not examined histopathologically.

Any F₁ dams found dead or sacrificed prior to delivery or the completion of delivery will be euthanized and grossly examined externally and internally. Any abnormalities will be recorded. Organs/tissues with gross lesions will be preserved in 10% neutral buffered formalin for possible histopathologic examination. The uterine contents of these F₁ females will be examined, and the number of implantation sites, if any, will be counted and recorded. Uteri with no macroscopic implantations will be opened and placed for approximately 10 minutes in aqueous ammonium sulfide solution (10%). If present, uterine implantation scars will be counted and recorded. Any resorptions noted will be graded (early or late), counted, and recorded. Any live fetuses will be euthanized via an intraperitoneal injection of 40% sodium pentobarbital (≈ 0.04 ml/fetus) and discarded.

9.0 Statistical Analyses:

One-way analysis of variance (ANOVA) will be used to analyze F₀ and F₁ generation body weights, body weight gains, and gestation duration; F₀ generation food consumption; F₁ generation motor activity; and the number of viable pups in the F₁ and F₂ generations. If a significant F ratio is obtained ($p \leq 0.05$), Dunnett's test will be used for pair-wise comparisons to the control group.

The Chi-Square test will be used to analyze F₁ generation sex ratios (PND0) and the mating and fertility indices. If a significant effect is seen ($p \leq 0.05$), the Fisher's Exact test will be used for pair-wise comparisons to the control group.

Mating Index = (No. with evidence of mating/No. co-housed) x 100

Fertility Index = (No. pregnant/No. with evidence of mating) x 100

The Kruskal-Wallis test will be used to analyze F₁ generation attainment of developmental landmarks and passive avoidance retention and the number of stillborn pups in the F₁ and F₂ generations. If a significant F ratio is obtained ($p \leq 0.05$), the Mann-Whitney U test will be used for pair-wise comparisons to the control group. Parameters recorded during conduct of the FOB will be analyzed by one-way ANOVA (count and interval data and air righting reflex), the Kruskal-Wallis test (rank data), or the Chi-Square test (quantal and descriptive data and palpebral closure). If a significant F ratio is obtained ($p \leq 0.05$), the appropriate tests will be used for pair-wise comparisons to the control group.

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Other statistical analysis will be conducted as deemed necessary and will be documented in the raw data.

In addition to the written report, summary data tables of parameters and variability will be transmitted to the Sponsor on magnetic media (computer diskette) in "ASCII" form. The transcribed data on disk will no longer be considered GLP compliant.

10.0 RECORDS TO BE MAINTAINED:

All data generated during the conduct of the study, except those that are generated by automated data collection systems, shall be recorded directly, promptly, and accurately in ink in bound books with prenumbered pages or on worksheets that shall be bound during or at the conclusion of the nonclinical laboratory study. All computer and machine output shall be bound during or at the conclusion of the study. All data entries shall be dated on the day of entry and signed or initialed by the person entering the data.

Any changes in entries for whatever reason (e.g., to correct an error or transposition) shall be made so as not to obscure the original entry, shall indicate the reason for such change, and shall be dated and signed or identified at the time of the change. In automated data collection systems, the individual responsible for direct data input shall be identified at the time of data input. Any changes in automated data entries for whatever reason (e.g., to correct an error or transposition) shall be made in such a manner so as not to obscure the original entry, shall indicate the reason for such change, and shall be dated and the responsible individual shall be identified.

Upon completion of the study and submission of the final report, all raw data, documentation, specimens, test article reserves and other materials necessary to reconstruct the study will be stored in the UIC/TRL archives maintained by Quality Assurance.

All changes or revisions, and reasons therefore, to this protocol once it is approved shall be documented, signed by the Study Director and Sponsor, dated and maintained with the protocol.

11.0 REGULATORY REQUIREMENTS:

This study will be performed in compliance with the UIC/TRL Quality Assurance Program designed to conform with FDA Good Laboratory Practice Regulations and EPA Good Laboratory Practice Standards.

Will this study be submitted to a regulatory agency? Yes If so, to which agency(ies)? U.S. Food and Drug Administration

Does the Sponsor Request that test article samples be returned? Possibly; direction will be provided by the Sponsor.

Does the Sponsor request that samples of the test article/carrier mixture(s) be sent to the Sponsor? No

12.0 REFERENCES:

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Contract No.: DAMD17-92-C-2001
Task Order No.: UIC-21
Study No.: 200

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Contract No.: DAMD17-92-C-2001
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13.0 PROTOCOL APPROVAL:

STUDY DIRECTOR:

Debra L. Kirchner 11/15/95
Debra L. Kirchner, Ph.D., D.A.B.T. Date

PRINCIPAL INVESTIGATOR:

Barry S. Levine 11/15/95
Barry S. Levine, D.Sc., D.A.B.T. Date

QUALITY ASSURANCE:

Ronald Schönbeck 11/15/95
Ronald Schönbeck Date

SPONSOR APPROVAL:

George J. Schieferstein 11/28/95
George J. Schieferstein, Ph.D. Date
Contracting Officer's
Representative (COR)

COMMENTS FROM THE COR:

Office of the Vice Chancellor for Research (M/C 672)
310 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7227
(312) 996-4995

Contract No.: DAMD17-92-C-2001
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Study No.: 200

Appendix 1

November 9, 1995

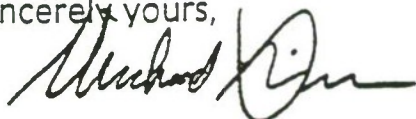
Barry S. Levine
Med - Pharmacology
312 BGRC, M/C 868

Dear Dr. Levine:

The modifications requested in your correspondence of November 6, 1995 pertaining to your approved protocol ACC: #93-077-19: "Oral Prenatal and Postnatal Development Study of WR238605 Succinate in Rats" have been reviewed in accordance with the Animal Care and Use Policies of the University of Illinois at Chicago. You will be pleased to know that the modifications were approved on November 9, 1995 and consequently the records of Animal Care Committee will be revised to reflect these changes.

Thank you for complying with the Animal Care Policies and Procedures of UIC.

Sincerely yours,

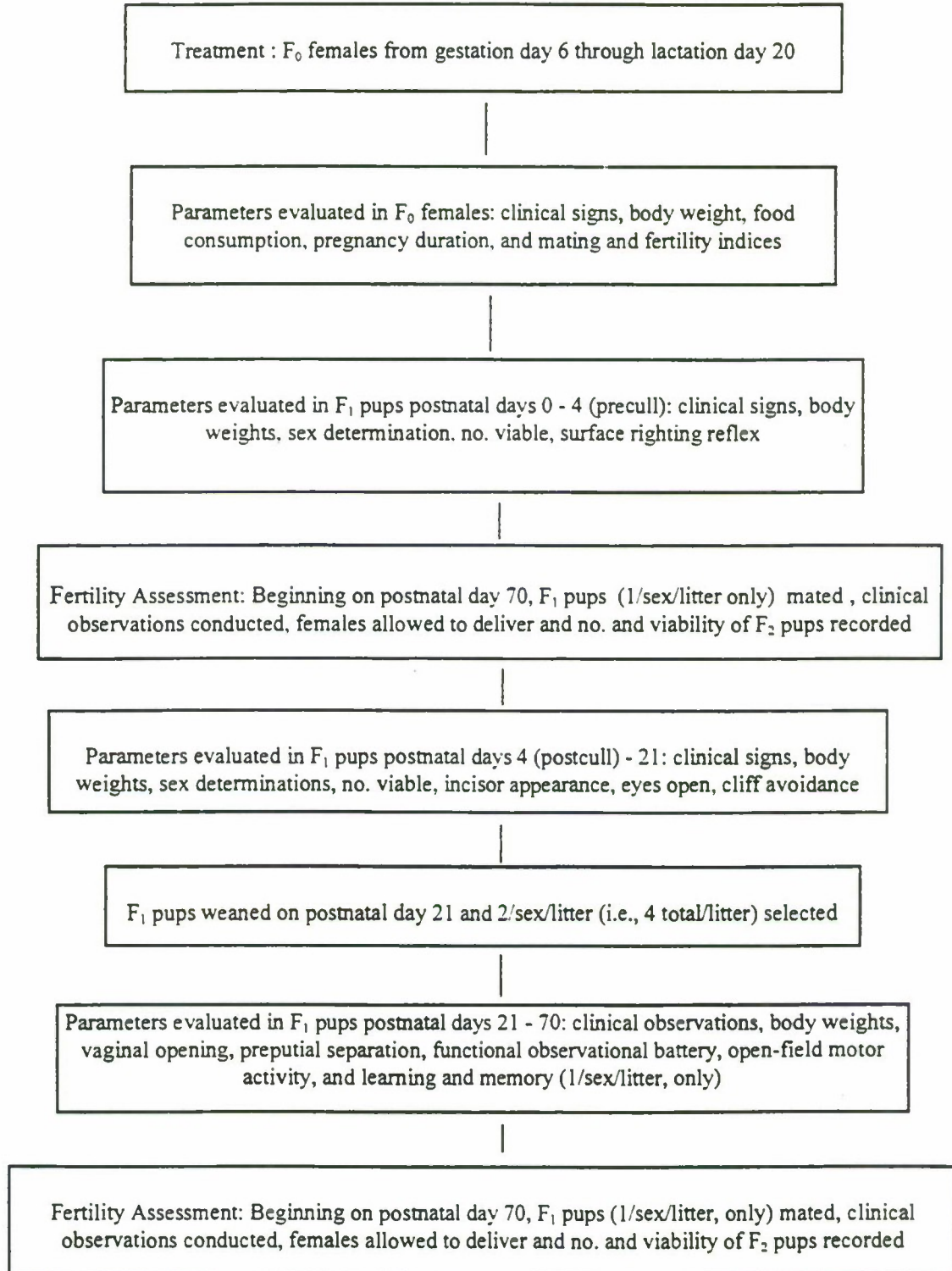


Michael W. Levine, Ph.D.
Chair, Animal Care Committee

MWL:st
xc: BRL

APPENDIX 2
Experimental Design

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PROTOCOL AMENDMENT

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Study No.: 200
Title: Oral Prenatal and Postnatal Development-Study of WR238605 Succinate in Rats

1. Page 1 Section 4.0

Add the following:

- | | | |
|-----|---|-----------------|
| 4.1 | <u>Proposed Initiation of Dosing (Gestation Day 6):</u> | <u>4/29/96</u> |
| 4.2 | <u>Proposed Completion of In-Life Phase:</u> | <u>9/27/96</u> |
| 4.3 | <u>Proposed Study Completion Date</u>
<u>(Draft Final Report):</u> | <u>12/27/96</u> |

Reason: Dates were not finalized when the protocol was submitted and to clarify that dosing will be initiated on gestation day 6.

2. Page 2 Section 6.0

Delete the following:

Reproductive Scientist	Roberto A. Matamoros, D.V.M., Ph.D.
Analytical Chemist	Adam Negrusz, Ph.D.

Reason: These personnel will not participate in this study.

3. Page 3 Section 7.3

In the 2nd line, change "in more than one shipment" to "in two shipments with two successive gestation day 0 dates per shipment".

Reason: To accurately describe the test system.

4. Page 3 Section 7.8

In the 2nd line add "and a separate study-unique number as a subcutaneously implanted microchip upon arrival at UIC" after "by the Supplier".

Reason: To clarify the procedure for the study-unique identification of the F₀ generation test system.

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5. Page 3 Section 7.9

- A. In the 1st line add ",F₁, and F₂" after "F₀".
- B. In the 2nd line delete "mating" and add "portions of the postnatal period as described in the protocol".

Reason: A. To indicate that all animals on study will be housed in an AAALAC-accredited facility.

B. To indicate that animals will be housed singly except as described in the protocol for different phases of the postnatal period.

6. Page 5 Section 8.4

Change the 2nd sentence to read as follows: "Each of the 4 gestation day 0 subsets will be separately randomized to result in 6 or 7 animals/group/day for a total of 25 animals/group".

Reason: To clarify the randomization procedure for the F₁ dams.

7. Page 6 Section 8.7.3

- A. In the 1st line add "(by the supplier)" after "gestation days 0".
- B. In the 2nd line add a comma between "12" and "15".

Reason: A. To clarify that gestation day 0 body weights will be recorded by the supplier.

B. To correct a typographical error.

8. Page 6 Section 8.7.4

Delete "; and postnatal days 1 - 4, 4 - 7, 7 - 10; 10 - 14; 14 - 17; 17 - 21".

Reason: Because the feed will be eaten by both the dam and the pups of the litter during the postnatal period, maternal food consumption will be measured only during the gestation period.

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9. Page 6 Section 8.7.5

Add the following sentence to the beginning of the Section: "F₀ dams will be observed at least twice daily for signs of parturition beginning on gestation day 18".

Reason: To indicate when and how often the F₀ dams will be observed for parturition.

10. Page 6 and 7 Section 8.7.6

- A. In the 1st line of the 2nd paragraph add "F₀" before "animals".
- B. Replace the 3rd paragraph with the following: "Any F₀ dams found dead or sacrificed prior to, during, or after the completion of delivery but prior to postnatal day 21 will be euthanized and grossly examined externally and internally. Any abnormalities will be recorded. Organs/tissues with gross lesions will be preserved in 10% neutral buffered formalin for possible histopathologic examination. Upon issuance of the final report, the Sponsor will provide written directions regarding the disposition of tissues not examined histopathologically. The uterus will be opened and the numbers of viable and nonviable fetuses, early and late resorptions, and/or implantation sites will be counted and recorded. Any viable fetuses will be euthanized via an intraperitoneal injection of 40% sodium pentobarbital (\approx 0.04 ml/fetus) and discarded. Uteri with no macroscopic evidence of implantations will be opened and placed in 10% aqueous ammonium sulfide solution for approximately 10 minutes for detection of early embryoletality or implantation".

Reason: A. To clarify that the F₀ dams will be grossly examined at necropsy.
B To clarify the procedures for the gross internal examination of the F₀ dams sacrificed prior to postnatal day 21.

11. Page 7 Section 8.8.2

Delete the 2nd sentence and replace with the following: "When possible, the litters will be culled via a computer randomization procedure using random numbers to yield a maximum of 4 pups/sex/litter (i.e., a maximum of 8 pups/litter)".

Reason: To clarify the culling procedure.

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12. Page 7 Section 8.9.2

In the 3rd line replace "at this age" with "from postnatal days 0 - 4".

Reason: To clarify when the clinical sign "milk in the stomach" will easily be identified through the translucent skin of the pups.

13. Page 7 Section 8.9.3

Change this section to read as follows: "Postnatal days 0, 4 (precull), 7, 14, 21, and weekly thereafter until study termination".

Reason: To clarify when body weights will be recorded for F₁ animals.

14. Page 7 Section 8.10

Change the day to begin observation of Cliff Avoidance from "16" to "15"; and change the days the observation is present from "18 - 20" to "16 - 20".

Reason: To clarify the days of observation of this developmental landmark.

15. Page 8 Section 8.11

A. In the 2nd sentence of the 1st paragraph add "a maximum of " before "two animals/sex/litter".

B. Change the 3rd sentence of the 1st paragraph to read as follows: "These two animals/sex will be, when possible, the same first two pups/sex that were randomly retained on postnatal day 4".

C. In the 4th sentence of the 1st paragraph change "The selected animals" to "All of the F₁ animals retained on postnatal day 21 or 22".

D. In the last sentence of the 1st paragraph delete "At the completion of the learning and memory evaluation" and replace with "At the start of the F₁ fertility phase".

Reason: A. To clarify the selection of F₁ animals on postnatal day 21 or 22.

B. To clarify the selection of F₁ animals on postnatal day 21 or 22.

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Study No.: 200
Title: Oral Prenatal and Postnatal Development Study of WR238605 Succinate in Rats

- C. To clarify which F_1 animals will be assessed in the functional observational battery, postweaning landmarks, and motor activity.
- D. To clarify when F_1 animals not selected for the fertility phase will be euthanized.

16. Page 9 Section 8.13.1

In the 3rd line of the 1st paragraph add "continuously" before "cohabitated".

Reason: To clarify that the F_1 pairs will not be separated until there is evidence of mating or until the end of the 14-day cohabitation period.

17. Page 9 Section 8.13.2

- A. In the 3rd sentence of the 1st paragraph add "at least" before "twice daily".
- B. In the 6th sentence of the 1st paragraph delete "or deliver incompletely (i.e., not able to deliver pups".
- C. In the last sentence of the 1st paragraph delete "or do not deliver".
- D. Delete the 2nd paragraph and replace with the following: "On the day of delivery, the numbers of viable and stillborn F_2 pups will be recorded. Any external abnormalities will be recorded. Viable F_2 pups will be euthanized via an intraperitoneal injection of 40% sodium pentobarbital (≈ 0.04 ml/fetus) and discarded. Stillborn F_2 pups will also be discarded".

Reason:

- A. To clarify how often F_1 dams will be observed for parturition.
- B. To clarify that F_1 dams that do not deliver will be euthanized and necropsied on gestation day 25.
- C. To clarify that F_1 dams with no evidence of mating will be euthanized and necropsied 25 days after the last day of cohabitation.
- D. To clarify how F_2 pups will be recorded, euthanized, and/or discarded.

PROTOCOL AMENDMENT

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Study No.: 200
Title: Oral Prenatal and Postnatal Development Study of WR238605 Succinate in Rats

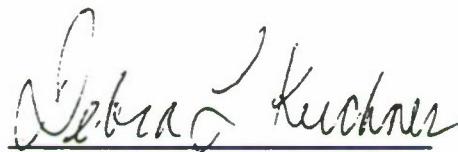
18. Page 10 Section 9.0

Delete the 1st sentence after the 1st paragraph and replace with the following: "The following F_1 generation reproductive indices will be analyzed by the Chi-Square test. If a significant effect is seen ($p \leq 0.05$), the Fisher's Exact test will be used for pair-wise comparisons to the control group".

Reason: To clarify how the mating and fertility indices will be analyzed.

APPROVALS:

STUDY DIRECTOR:


Debra L. Kirchner, Ph.D., D.A.B.T.

4/29/96
Date

QUALITY ASSURANCE:


Ronald Schoenbeck

4/29/96
Date

SPONSOR APPROVAL:


George Schieferstein, Ph.D.

5/1/96
Date

PROTOCOL AMENDMENT

DRAFT

Study No.: 200
Title: Oral Prenatal and Postnatal Development Study of WR238605 Succinate in Rats

19. Page 6 Section 8.7.3

In the 3rd line change "1" to "0".

Reason: To clarify that the F₀ generation body weights will be recorded on postnatal day 0.

APPROVALS:

STUDY DIRECTOR

Debra L. Kirchner
Debra L. Kirchner, Ph.D., D.A.B.T.

5/17/96
Date

QUALITY ASSURANCE

Ronald Schoenbeck
Ronald Schoenbeck

5/17/96
Date

SPONSOR APPROVAL

George J. Schieferstein
George J. Schieferstein, Ph.D.

5/29/96
Date

PROTOCOL AMENDMENT

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Study No.: 200
Title: Oral Prenatal and Postnatal Development Study of WR238605 Succinate in Rats

20. Page 6 Section 8.7.5

In the 3rd sentence change "The day of parturition is" to "The day parturition is observed will be".

Reason: To clarify the designation of postnatal day 0.

21. Page 9 Section 8.13.2

A. Change the 1st sentence of the 2nd paragraph as follows: "On the day parturition is observed, the numbers of viable, stillborn, and nonviable F₂ pups will be recorded".


B. Change the 4th sentence of the 2nd paragraph to read as follows: "Stillborn and nonviable F₂ pups will also be discarded.

Reason: A. To clarify how the F₂ pups will be recorded

B. To clarify that no F₂ pups will be retained on study.

APPROVALS:

STUDY DIRECTOR


Debra L. Kirchner, Ph.D., D.A.B.T.

8/19/96
Date

QUALITY ASSURANCE


Ronald Schoenbeck

8/19/96
Date

SPONSOR APPROVAL


George J. Schieferstein, Ph.D.

8/26/96
Date

PROTOCOL AMENDMENT

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Study No.: 200
Title: Oral Prenatal and Postnatal Development Study of WR238605 Succinate in Rats

22. Page 10 Section 9.0

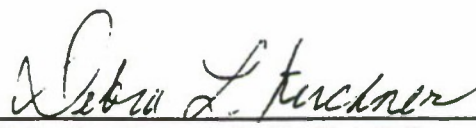
- A. Delete the 1st sentence of the 1st paragraph and replace with the following: "One-way analysis of variance (ANOVA) will be used to analyze F_0 and F_1 generation body weights, body weight gains, and gestation duration; F_0 generation food consumption; F_1 generation motor activity; and the number of viable pups in the F_1 and F_2 generations".
- B. Change the 1st sentence of the 2nd paragraph to read as follows: "The Chi-Square test will be used to analyze F_1 generation sex ratios (PND0) and the mating and fertility indices".
- C. Delete the 3rd paragraph and replace with the following: "The Kruskal-Wallis test will be used to analyze F_1 generation attainment of developmental landmarks and passive avoidance retention and the number of stillborn pups in the F_1 and F_2 generations. If a significant F ratio is obtained ($p \leq 0.05$), the Mann-Whitney U test will be used for pair-wise comparisons to the control group. Parameters recorded during conduct of the FOB will be analyzed by one-way ANOVA (count and interval data and air righting reflex), the Kruskal-Wallis test (rank data), or the Chi-Square test (quantal and descriptive data and palpebral closure). If a significant F ratio is obtained ($p \leq 0.05$), the appropriate tests will be used for pair-wise comparisons to the control group".

Reason:

- A. To clarify which F_0 , F_1 , and F_2 generation parameters will be analyzed by one-way ANOVA.
- B. To clarify which F_1 generation parameters will be analyzed by the Chi-Square test.
- C. To clarify which F_1 and F_2 generation parameters will be analyzed by the Kruskal-Wallis test and how the parameters recorded during conduct of the FOB will be analyzed.

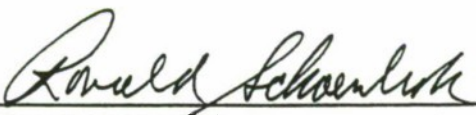
APPROVALS:

STUDY DIRECTOR


Debra L. Kirchner, Ph.D., D.A.B.T.

1/30/97
Date

QUALITY ASSURANCE


Ronald Schoenbeck

1/30/97
Date

SPONSOR APPROVAL

George J. Schieferstein, Ph.D.

Date

DRAFT

APPENDIX P
STUDY DEVIATIONS

DRAFT

ORAL PRENATAL AND POSTNATAL DEVELOPMENT
STUDY OF WR238605 SUCCINATE IN RATS

Study Deviations*

<u>Deviation Type</u>	<u>Specific Deviation</u>	<u>Effect on Study</u>
Protocol	Humidity was out of range on one day; temperature was out of range on several days.	None; all of the deviations were minimal.
Protocol	Pup weights and clinical signs were not recorded on PND0; and toe clipping was performed on PND1 for the litter of Dam No. 138 (2 mg base/kg/day). Body weight data excluded from statistical analysis.	None; sufficient data exists to interpret body weights and clinical signs in this group. Toe clipping may be performed between PND0 and PND4.

*The detailed "Deviation Reports" are contained in the raw data which are archived at the Toxicology Research Laboratory, University of Illinois at Chicago, Department of Pharmacology, 1940 W. Taylor St., Chicago, Illinois, 60612.

The above deviations did not affect the integrity of the study.

Debra L. Kirchner, Ph.D., D.A.B.T.

Date

Thur 27 Mar

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